Public Utilities

FORTNIGHTLY

December 3, 1942

A NEW DEPRECIATION FALLACY
By Luther R. Nash

« »

Democracy and Free Enterprise—in Peace and in War
By J. B. Hill

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A Plea for the Stockholder
By Harry H. Frank

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Public Utilities Fortnightly

VOLUME XXX *December 3, 1942* NUMBER 12

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¶ *This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.*

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Pages with the Editors

IT was a most serious group of state commissioners who met in the fifty-fourth annual convention of the National Association of Railroad and Utilities Commissioners at St. Louis, Missouri, November 10th to 12th. A fair résumé of the views expressed and the ensuing discussion will be found in the excerpts from the various addresses and committee reports published in this issue as a special feature, entitled "What the State Commissioners Are Thinking About." (See page 798.)

OUR principal reaction as observers at this important meeting was the impression that the state commissioners are determined to be more than interested bystanders at the present spectacle of Federal regulation of utilities for purposes of the emergency. The state commissioners have offered to coöperate with the Federal government and so far the Federal government does not seem to have availed itself fully of that proffered assistance. Now the state commissioners, or a great many of them at least, are not going to hesitate to criticize any shortcomings which may result from Federal administration of the many prodigious emergency tasks.

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LUTHER R. NASH

Our regulatory conceptions of depreciation are in need of modernization.

(SEE PAGE 761)

AND this is all to the good. No one could have come away from the St. Louis convention with the feeling that state commissioners were any less anxious than the Federal officials to see to it that the utilities go all out for the war effort. There was no suggestion that the state commissioners were not just as anxious for an aggressive prosecution of the war on the home front as the Federal administrators. But many of the state commissioners seem to feel that they can best serve as intelligent observers and constructive critics in the field where Federal emergency regulation touches the utilities. In this way the Federal government will at least have the benefit of valuable suggestions.

FURTHERMORE, it is not at all beyond the realm of possibility that some phases of Federal emergency regulation will be found wanting. Some may even break down and other methods will have to be tried. The action of the Office of Defense Transportation, for an example, in declining to make use of the 4,000 experienced men of the long-estab-

HARRY H. FRANK

The Jacksonville Gas formula is no panacea for all corporate ills.

(SEE PAGE 781)

lished state regulatory staffs in administering the emergency transportation program may have to be reconsidered. The ODT has gone ahead and assembled an independent army of civilian workers, many without any previous experience in regulation. This, at a time when there is a great scarcity of man power. The ODT will be held accountable for the performance of this program—performance commensurate with the expense and size of personnel employed.

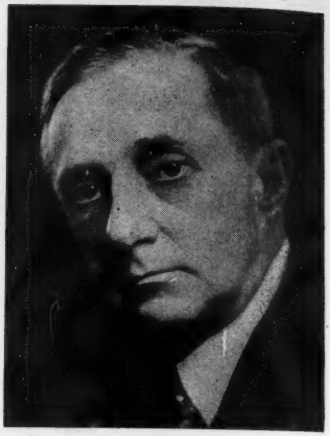
UNSATISFACTORY performance, if such should materialize, would again revive the proposal to have state commissions and their staffs participating more actively in the administration of Federal emergency regulation. ODT is only one of several similar situations where problems of Federal and state coöperation remain to be solved. And so, by the time the state commissioners hold their next convention—in 1943—state regulatory officials may find themselves in more important rôles for the national war effort. That is, assuming that there will be a national war effort continuing in operation at the time the NARUC holds its next meeting.

ONE of the hardy perennial problems of utility regulation which received more than the usual amount of attention at the NARUC meeting was depreciation. Commissioner Richard J. Beamish of the Pennsylvania Public Utility Commission, in addressing the conclave, spoke of depreciation as the great unsolved problem of regulation, the solution of which might have a most significant effect on the rate structures of most public utility companies.

IT so happens that the leading article in this issue contains a reëxamination of some of the basic concepts of utility depreciation by a writer who is not only a veteran utility operator but a recognized authority on public utility economics. He is LUTHER R. NASH, who will be recalled by many readers for his long service as an official of the Stone & Webster organization.

A graduate of the Massachusetts Institute of Technology in 1894 and from Harvard (S.M., '98), MR. NASH has, in addition to his career as an appraisal engineer and rate expert, written numerous magazine articles and monographs on utility problems—including the book "Economics of Public Utilities."

A NEWCOMER to these pages is the author of the article entitled "Democracy and Free Enterprise—in Peace and in War"—J. B. HILL, president of the Louisville & Nashville Railroad Company since November, 1934. Born in Tennessee in 1878, MR. HILL graduated from the Peabody College for Teachers in that state ('98) and began his career as a telegraph operator on the Nashville, Chattanooga & St. Louis Railway. He has been working up the line ever since.



J. B. HILL

We have made a bad job of keeping ourselves sold on the system of free private enterprise.

(SEE PAGE 775)

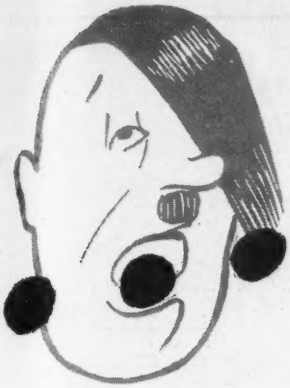
ANOTHER newcomer to our FORTNIGHTLY pages contributed to this issue. He is HARRY H. FRANK, whose article on the so-called "Jacksonville Gas formula" begins on page 781. MR. FRANK is a graduate of the University of Pittsburgh School of Business Administration (B.S., '26) and the University of Pittsburgh Law School (LL.B., '29). He served on the legal staff of the Pennsylvania Public Utility Commission until early this year, becoming assistant counsel for that body in 1937. He is now associated with the Philadelphia law firm of Conlen, LaBrum & Beechwood.

AMONG the important decisions preprinted from *Public Utilities Reports* in the back of this number, may be found the following:

FAIR value of a transit company's property, rate of return, revenues, expenses, taxes, rentals, and annual depreciation were considered by the Pennsylvania commission as a basis for its conclusion that higher rates were not justified. (See page 257.)

THE next number of this magazine will be out December 17th.

The Editors



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PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions published in full text, pages 257–320, from 45 PUR(NS)

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Chief, Transportation Corps, Services of Supply, U. S. Army.

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ROGER W. BABSON
Financial authority.

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WAYNE CHATFIELD-TAYLOR
Under Secretary of Commerce.

". . . in the face of the common enemy American business has lost its fear of the future."

CHARLES GORDON
Managing director, American Transit Association.

"The problem of obtaining additional transit equipment in any community has become a *public* problem in every sense of the term."

EDITORIAL STATEMENT
Edison Electric Institute Bulletin.

"It is a peculiar and timely virtue of any kilowatt hour that it will do just as much work whether produced from high, low, or medium cost generating facilities."

J. FRENCH ROBINSON
President, East Ohio Gas Company.

"Reverses in a war are part of war . . . neither side in a war tells its people just what it is up against. At a time when truth is most needed, truth becomes illegal."

JOSEPH B. EASTMAN
Director, Office of Defense Transportation.

"There are very few things that are impossible, but I hope we shall not find it necessary to determine by actual trial whether general passenger rationing is possible."

LEONARD P. AYRES
Vice president, Cleveland Trust Company.

"The only way to avoid unlimited competition to secure stocks of the materials that are essential to our effort is through a centrally controlled system of allocations."

THOMAS C. BUCHANAN
Commissioner, Pennsylvania Public Utility Commission.

"Our sole consideration under the Public Utility Law is for the protection of the ratepayer, the theory being that the security holder can and usually does take care of himself."

J. HOWARD PEW
President, Sun Oil Company.

"Private enterprise operating under competition, free of the inhibiting and strangulating interference of government, has proved itself the best of all systems in times of peace."

HENRY MORGENTHAU
Secretary of the Treasury.

"Ability to pay taxes must be judged in terms of family incomes and not the incomes of members of the family."

EDITORIAL STATEMENT
The Wall Street Journal.

"There is at least one department of our national effort which seems to have unheated bearings and a refreshing absence of noise in its machinery, despite its 'stepping up' to a degree of efficiency hitherto unattained—railroad transportation."

FIORELLO H. LAGUARDIA
Mayor of New York city.

"The government builds a plant; it is government owned and, therefore, [tax] exempt. But it is unfair for the Federal government to collect its taxes, and then turn around and say to the municipal government, 'this property is tax exempt.'"

WILLIAM F. BROOKS
Executive editor, Forbes.

". . . in late years, facts about business have not been as readily available or accessible as are the facts about government, world economy from a theorist point of view, or facts about social experimentations which are being tried over the world. This is the fault of business."

ROBERT R. NATHAN
Chairman, Planning Committee, War Production Board.

"Out of this war experience should and will come not only victory for the free nations, but also a greater understanding and a greater degree of economic literacy which will permit us to mobilize for peace as we have mobilized for war—in a free enterprise, private property, democratic system."

ARCHIBALD MACLEISH
Director, Office of Facts and Figures.

"It is no longer enough for any journalist to work solely for the freedom of ideas; it is necessary now to work also for the idea of freedom. And any journalistic activity which blocks or chokes or retards the struggle for the idea of freedom must go the war-time way of the passenger automobile and the mechanical refrigerator."

EVERETT M. DIRKSEN
U. S. Representative from Illinois.

"Congress will not enjoy that prestige, assertiveness, and independence which the legislative branch should enjoy until it provides itself with mechanisms for continuous investigation of all phases of government. It must be able to challenge the information presented by government functionaries with expert information assembled by its own expert staffs."

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President, New York Stock Exchange.

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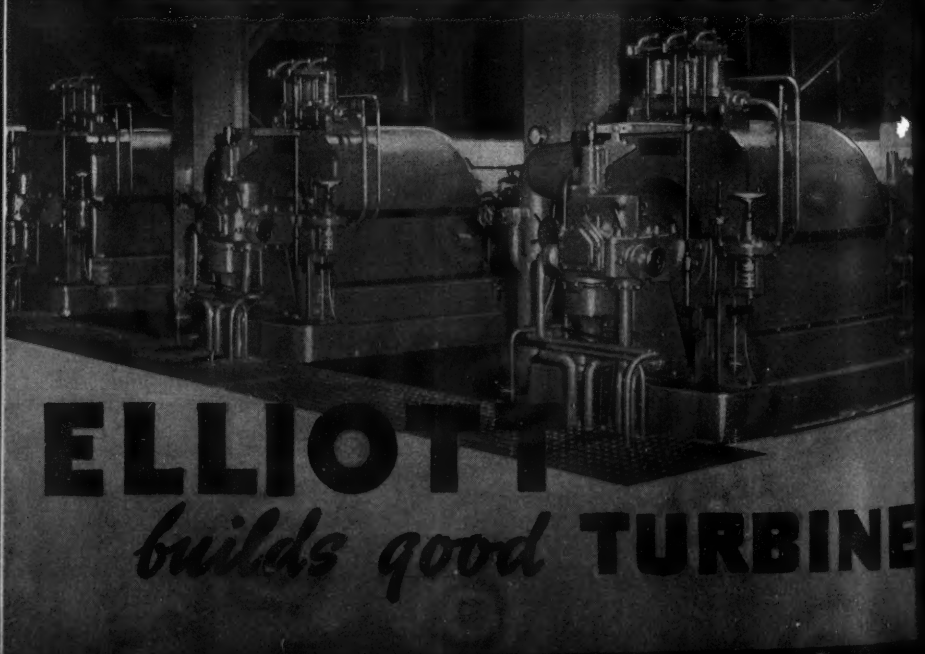
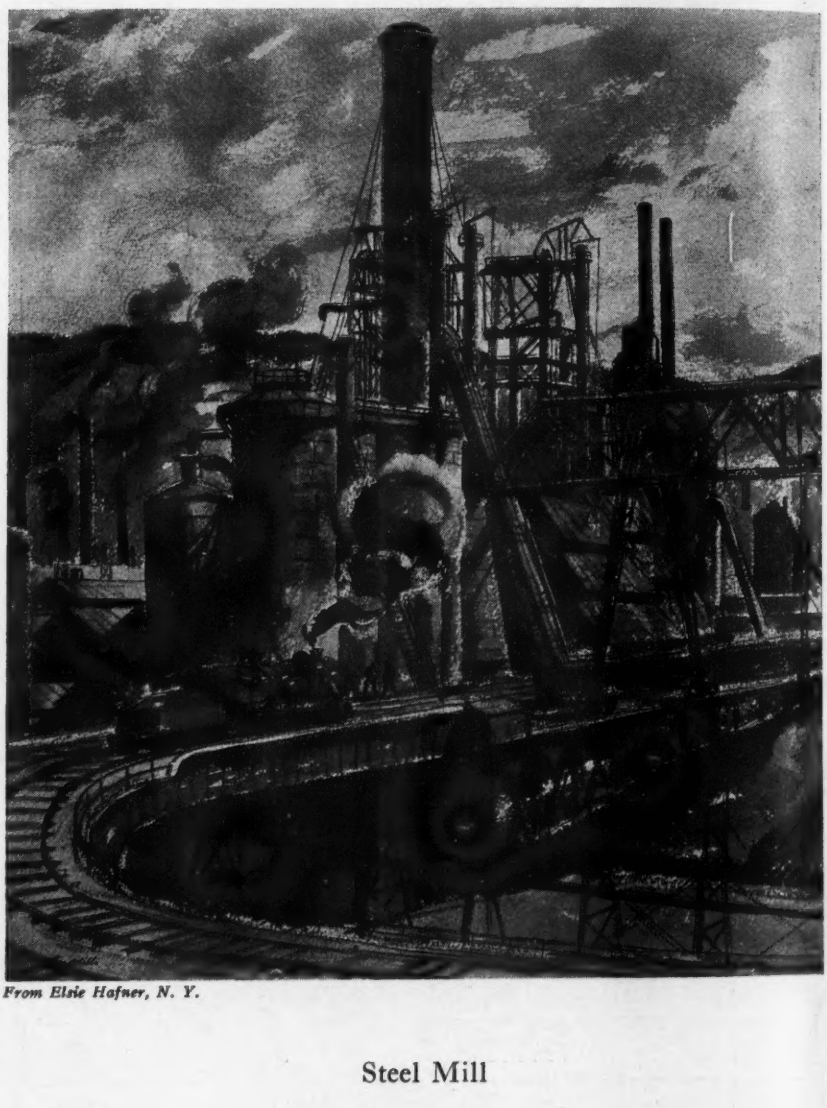


Utilities Almanack

Due to war-time travel restrictions, conventions listed are subject to cancellation.

DECEMBER

3	Th	¶ *New England Transit Club holds convention, Boston, Mass., 1942.*
4	F	¶ *American Society of Mechanical Engineers concludes meeting, New York, N. Y., 1942.*
5	Sa	¶ *Arizona Municipal League will hold meeting, Yuma, Ariz., Dec. 18, 19, 1942.*
6	S	¶ *American Economic Association will hold meeting, Cleveland, Ohio, Dec. 29–31, 1942.*
7	M	¶ *American Society of Agricultural Engineers opens fall meeting, Chicago, Ill., 1942.*
8	Tu	¶ *Arkansas Municipal League holds session, Little Rock, Ark., 1942.*
9	W	¶ *American Association of State Highway Officials concludes 2-day meeting, St. Louis, Mo., 1942.*
10	Th	¶ *American Standards Association holds annual meeting, New York, N. Y., 1942.*
11	F	¶ *Associated General Contractors of America, Northern California Chapter, starts convention, San Francisco, Cal., 1942.*
12	Sa	¶ *Technical Valuation Society holds annual forum, New York, N. Y., 1942.*
13	S	¶ *American Public Welfare Association ends 2-day meeting, Baltimore, Md., 1942.*
14	M	¶ *Society of Automotive Engineers will hold war production-engineering meeting, Detroit, Mich., Jan 11, 12, 1943.*
15	Tu	¶ *American Society of Civil Engineers will hold annual meeting, New York, N. Y., Jan. 20–22, 1943.*
16	W	¶ *American Institute of Electrical Engineers will hold winter convention, New York, N. Y., Jan. 25–29, 1943.*



From Elsie Hafner, N. Y.

Steel Mill

By Gurdon Howe

Public Utilities

FORTNIGHTLY

VOL. XXX; NO. 12 DECEMBER 3, 1942

A New Depreciation Fallacy

The author analyzes the "reserve requirement" theory, including its retroactive feature, as a measure of existing depreciation and finds it unsound and also unfair to the utilities.

BY LUTHER R. NASH

WHAT, another article about depreciation! The author, in spite of his tough hide and many years of exposure to chilling verbal blasts, would have hesitated to face such a sarcastic comment were it not for the fact that certain new notions are being projected into this phase of public utility operations. They need careful scrutiny before they are accepted—or quietly buried.

Six years ago regulatory authorities prescribed for the electric and gas utilities new systems of accounts, far more complicated than those previously used. The utilities accepted them with misgivings, partly because they had been permitted but little share in their preparation. More particularly the utilities were uneasy over the injection of the new concept of "original cost" with its complications, and the resuscitation (not by the prone pressure method) of the ambiguous word "depreciation." This term did not appear in the previously prescribed uniform system of accounts.

The basic purpose of the new depreciation accounting program does not differ from that of the earlier prescribed systems; namely, to provide for the retirement of property units when they have ceased to be useful. The previously used phrase "retirement ac-

counting" was intended to express that purpose in clear and unmistakable language. However, the method of accomplishing this common purpose has been changed, in important respects, by interpretation if not by the established text. It is now necessary to record the so-called depreciation which "accrues" in each accounting period, usually a month, rather than in a year or longer time.

IT is obviously impossible, by direct examination or otherwise, to determine what has actually taken place physically or economically in such a brief period. A far longer time is necessary to detect definite trends and such trends are subject to continuous or frequent change. To avoid such barriers to accuracy the program ignores intermediate conditions and relies on the "end point." In other words, it assumes the date of final retirement, divides the depreciable cost by the months in the useful life period, and further assumes that the depreciation accrues uniformly during each of those many months. This procedure involves two questionable assumptions: (1) that useful life can be determined in advance with needed accuracy, and (2) that uniformity in the progress of depreciation or loss in usefulness actually occurs and will continue to occur throughout the entire life period.

Although it is not the purpose of this article again to throw a hat into the "useful life" arena, its author cannot resist the impulse to remark that in more than two score years of intimate contact with many public utility properties he has been unable to find a consistency in past useful life experience that would justify the employment, in the future, of any mathematical processes based thereon. It would still be unjustified even if the obviously false assumption were made that the physical characteristics of the property to be retired in the future are similar to those of the property retired in the past.

TURNING now to the matter of uniformity of accruals, two phases of its effects are important. There is the propriety or expediency of such procedure with respect to the monthly or annual charges. There is the significance of the resulting accumulated reserves.

Uniformity has obvious advantages, provided it has a reasonable and stable basis, but it is suggested that the uniform retirement of a known sum of money in a fixed time is properly called amortization and may have little relation to depreciation. In fact, in earlier years this process of retiring utility property investment was called amortization rather than depreciation in certain state accounting systems and the reserve thereby created was known as an amortization reserve.

With the understanding that that is what the procedure really means and that its basic time is subject to periodic adjustment, many utility managements are trying to adjust themselves to it in spite of the known disadvantages of its rigidities. They might go further and admit, probably with reluctance and reservations, that an amortization reserve might *at some rather remote future date* be accepted as an arbitrary measure of the (then) accrued depreciation for use in rate cases. That assumes that such cases will not become a permanent casualty of the war.

UTILITY managements, however, are very definitely looking askance at a new notion that has begun to appear in the presentations of rate cases and in the decisions of certain regulatory commissions. It has not yet been scrutinized by the higher courts. That notion is tagged with the term "reserve requirement." It is understood to mean the reserve that would have been created during the existence of surviving property if present estimates or guesses as to useful life had been appropriate for and applied uniformly in all the intervening years on a straight-line basis.

Proponents of this theory contend that this retroactive "reserve requirement," rather than the actual existing depreciation in the property, as heretofore found by commissions and courts, is the sum which should be deducted from cost or reproduction cost to obtain present fair value in rate case procedure. It is assumed or implied that the failure to follow this new procedure during all the past years was an error of the utilities for which they should now bear the full responsibility.

It is well known, of course, that no such depreciation procedure as is now required was included in the accounting systems of the utilities under consideration prior to 1936. The uniform system adopted in 1922, the first nationally standardized system, provided for retirements only under a program embodying some flexibility. We know, also, that this provision was approved after extended discussion among utility and commission representatives and was adopted by nearly all the commissions having jurisdiction over accounting. Prior to 1922 there was little uniformity in accounting methods among utilities, but they were gradually developing a program relating to retirements similar to that adopted in 1922. Finally, we know that, prior to the past thirty-five years, the Supreme Court of the United States had expressed its disapproval of advance provisions for retirements as a part of the cost of service.

AN appreciable part of present utility property was in existence prior to the time when depreciation was first recognized. The major part of it was installed long before the present accounting systems were prescribed. The present reserves for retirements of the electric power companies are, on the average, more than 10 per cent of their plant investment and they have been increasing gradually over the years as appreciation of their need has developed.

❦

¶ "THE *basic purpose of the new depreciation accounting program does not differ from that of the earlier prescribed systems; namely, to provide for the retirement of property units when they have ceased to be useful. The previously used phrase 'retirement accounting' was intended to express that purpose in clear and unmistakable language. However, the method of accomplishing this common purpose has been changed, in important respects, by interpretation if not by the established text.*"

Mathematical analyses have shown that if these companies had been permitted to adopt the straight-line method of depreciation when the first of their now surviving units was installed and had followed it consistently through all the intervening years, the present reserves would be more than 30 per cent of their depreciable investment. (This percentage would be affected to a material extent by the rate at which the property had grown.) Telephone companies that have used this method for more than twenty-five years have reserves that are approaching this percentage, although they doubtless provide also for retirements for causes not clearly visualized. Computations of the "reserve requirement" which have been made for rate case or other purposes show similar results, as they should, because of the similarity of procedure.

THIS difference between the reserves actually created in the past and those that would have been created under the straight-line accruals is striking. It amounts to about 20 per cent of total investment. It is accounted for, in part, by the failure of the companies in the early years to make as liberal provisions as they would have done if the present knowledge and experience had then been available or if the future requirements of regulatory authorities had been foreseen.

Such earlier and modest treatment of depreciation prevailed not only in the utility field but in other industries and business. Another reason for such differences is that utility managements were exercising their judgment as to retirement needs rather than using mathematical processes with a questionable basis. They were, and still are, far from convinced that there is uniformity in the progress of depreciation, or, as they may have preferred to call it, the accrual of retirement liability. Some of them also decided to leave in surplus accounts their provisions for retirements due to unknown or emergency causes. They naturally are not reconciled to the wiping out of 20 per cent of their investment, which would be the effect of applying the "reserve requirement" theory.

STRAIGHT-LINE accumulations may also provide for many things that are not properly classified as depreciation. At least, that has been the opinion of regulatory commissions which have found such reserves far in excess of existing depreciation. Our Supreme Court has characterized such procedure as "elaborate calculations that are at war with realities" or "the calculations are mathematical but the predictions underlying them are essentially matters of opinion." It has also consistently held that existing depreciation must be determined in each case by an examination of the condition of the property rather than by "mere calculations based on averages and assumed probabilities." This would seem to exclude the reserve requirement as now being promoted as a measure of existing depreciation.

There are further reasons why the reserve requirement may not represent actual depreciation. If the life tables used for its computations are based on some actual experience, they do not reflect full normal life experience because they include sundry pre-

Uniformity of Accruals

"UNIFORMITY [of accruals] has obvious advantages, provided it has a reasonable and stable basis, but it is suggested that the uniform retirement of a known sum of money in a fixed time is properly called amortization and may have little relation to depreciation. In fact, in earlier years this process of retiring utility property investment was called amortization rather than depreciation in certain state accounting systems and the reserve thereby created was known as an amortization reserve."

mature retirements due to storms, fires, automobile collisions, and other casualties. In defining depreciation the new accounting systems include only "causes which are known to be in current operation," presumably with appreciation of the meaning of this limitation. A hurricane, a carelessly dropped match, and a drunken driver are not within the category of such causes.

While it is prudent to provide for such contingencies, they do not involve depreciation as defined, and they certainly do not accrue uniformly. A reserve adequate for all causes of retirements, including not only depreciation and casualties but also unforeseen developments of an engineering, economic, or social character, should be definitely larger than, and should not be used as a measure of, existing depreciation.

ANOTHER factor affecting the validity of reserve requirement computations needs attention. It is unusual to find complete records of useful life of property units other than for the particularly large ones. Resort is had, therefore, to investment records from which the age of the dollars in the various accounts or the property as a whole can be found. The trouble with this method is that the age of the dollars is not the same as the age of the property which they represent and which is the thing sought. Because of price changes and the varying purchasing power of money during the past years the difference is far from negligible. For example, the sum of money that would have bought 500 feet of No. 6 weatherproof wire twenty-five years ago, would have bought 1,500 feet ten years ago, but will buy only 1,000 feet now. These

changes have all occurred within the life history of existing lines. Other price changes have been less violent. But their over-all effect introduces a serious error in reserve requirement computations.

Let us, now, explore further the differences between existing reserves and this reserve requirement in order to determine the extent to which the latter is in excess of actual existing depreciation, and the extent to which the former are less than they should be. Let us consider, also, the possibilities of fixing a "ceiling" above which existing depreciation, as defined in the accounting regulations, should not go (at least, if uniformity of accruals is given due regard). For such purposes the author has made extended analyses of electric power properties to determine what has been the actual experience of typical ones. That would include operating steam plants, local and long-distance transmission lines, substations, overhead and underground distribution, and the usual collection of buildings and other facilities.

THESE analyses, and others of wider scope, show that about 20 per cent of all past retirements have been from physical causes, including wear, decay, and corrosion. These may be assumed to be progressive, with approach to uniformity. The remaining causes, nonphysical in general character and accounting for 80 per cent of past retirements, have so far defied classification or consistency in their effects and probably will continue to do so. Such lack of uniformity is not only the experience of utility engineers and operators but is also recorded in the decisions of our Supreme Court. Generalities along this line, however, do not afford a solution of our "ceiling" problem and a further breakdown of property characteristics is needed.

Normal properties include substantial parts not subject to any depreciation. They include land and rights of way that are more likely to appreciate in value. There might be included in this category most of the underground conduit, consisting of vitrified or other similar duct laid in concrete. Such construction, together with its connecting manholes, does not deteriorate, is subject only to incidental disturbances from explosions, broken water mains, or changes in or additions to other subsurface structures, properly paid for by their owners. The cable laid in such conduit can be replaced or changed whenever needed, but no material change in the general pattern of underground systems is in sight. It is difficult, therefore, to find any progressive depreciation in such property.

SALVAGE, which is the undepreciable part of otherwise depreciable items, is also in this class. It is often underestimated because it properly includes not only scrap items but also those prematurely removed from service because of street improvements and other changes and which can be given a reuse value. Net salvage, so computed, has been found to exceed 10 per cent of the cost of all retired items in certain cases. Such items as the above comprise not less than 20 per cent of the total investment in a typical property.

Next to be considered is a group of items subject to what may be called cyclical depreciation. Many of these items are in the power station group,

which altogether makes up about 40 per cent of system investment. A typical illustration is a modern steam, turbo-generator unit, consisting essentially of a massive frame and body and a complicated system of moving and stationary blades. This blading is subject to fairly rapid erosion due to the very high velocity of the steam that finds its way through its labyrinths. The installation of a new set of blades every ten years or thereabouts is an expensive job, costing about one-sixth of the cost of the complete unit and its accessories.

THE body of the unit is not affected by these changes or by indefinite operation; and the necessary repairs, replacements, and adjustments of small parts are taken care of from time to time through maintenance. Metallurgical research has brought about continuing improvement in alloy steels and each new set of blades is better and lasts longer than those replaced. The over-all result of such turbine performance is that there is a progressive deterioration of parts of the unit, but not its bulk, and that these parts are periodically replaced, after which the unit is better than it was originally.

The experience with condensers, attached to turbine units, is quite similar. They are made up of massive, durable bodies and a multitude of nonferrous tubes which are subject to corrosion and erosion. The frequency of required replacements varies with the character of the condensing water but may agree closely with that of turbine reblading. The cost, however, is a larger proportion (about 25 per cent) of the total cost of the unit. Again, the new tubes may be better than the old for similar reasons. Here, also, there is partial deterioration, duly restored to at least original serviceability at necessary intervals.

INCIDENTALLY, the funds necessary to make these periodic partial replacements in such a unit and to retire it at the end if its life, aside from routine minor repairs, will be far more than its original cost. The amount would be, perhaps, double if four complete tube changes have been made, with correspondingly increased demands upon the retirement reserve which is normally used to handle such large items.

Another important item in power station equipment is boilers. Unlike the items just considered, a boiler installation includes such a multitude of dissimilar parts that it is impracticable to make clear distinctions between per-

¶ "AN *appreciable part of present utility property was in existence prior to the time when depreciation was first recognized. The major part of it was installed long before the present accounting systems were prescribed. The present reserves for retirements of the electric power companies are, on the average, more than 10 per cent of their plant investment and they have been increasing gradually over the years as appreciation of their need has developed.*"

manent and renewable parts. It may be said, however, that a very large proportion is renewable and is replaced from time to time so that after a period of years only a few of the major parts of the original installation remain. Again, depreciation is not continuously progressive. (This situation somewhat suggests the case of the farmer who boasted of using the same axe for twenty years. He always explained that aside from renewing the head several times and the handle several times, it was "almost as good as new.")

OUTSIDE of the power station are many items of widely differing kinds and functions. Among them are line transformers, subject to burnouts from accumulated overloads or damage from lightning. Their life is not then over, for they may be rewound, preferably with new, higher permeability cores which make them more efficient than when new, at about two-thirds of the original cost. There have been no fundamental changes in customers' meters for many years and it is the general practice to replace their parts, often with improvement of their registration characteristics. Other minor items such as oil switches, bushings, etc., are replaced or reconstructed with improved parts which restore the original serviceability of the equipment with which they are associated.

Such illustrations of restored serviceability, which are elementary and well known to utility operators, might be expanded. But enough has been said to make clear that continuously progressive loss in usefulness or service value does not take place in the major units of utility property.

Consideration may now be given to a class of property whose present situation depends not upon the physical condition of its own units but upon their integration with others. Although they may be physically unimpaired, such units may appear to be approaching the end of their useful life because of low efficiency, limited capacity, or by the availability of units better adapted to modern conditions of operation. It is then discovered that they can be made a part of a modernized system of more efficient and reliable operation and so continue for many years.

THE typical illustration of such units is the low-pressure steam turbine, commonly purchased twenty or more years ago. As steam pressures and sizes of units trended upward, with marked gains in efficiency, the older units seemed to be headed for the junk yard. Then it was found that by adding high-pressure, "topping" units, exhaust steam from which is then used by these older units before passing to their condensers, the efficiency of production could be increased substantially at a relatively low cost. Such rejuvenated old units show every indication of lasting through the life cycle of their new associates. The percentage of their expired life is abruptly changed from 90 or higher to 50. Depreciation is definitely negatived. Condensers and other auxiliary equipment associated with these units are similarly affected. Boilers, also, which otherwise would be retired, may be kept in service, at least for emergency or peak-load use. Similar rejuvenation, outside of power stations, so far has been relatively unimportant.

Straight-line Accumulations

"STRAIGHT-LINE accumulations may . . . provide for many things that are not properly classified as depreciation. At least, that has been the opinion of regulatory commissions which have found such reserves far in excess of existing depreciation. Our Supreme Court has characterized such procedure as 'elaborate calculations that are at war with realities' or 'the calculations are mathematical but the predictions underlying them are essentially matters of opinion.'"

The over-all effect, however, of this reversal of the progress of depreciation is significant.

ANOTHER class of items with distinctly different case history should also be mentioned. These are items which, although not immediately needed, may be economically installed along with some other presently needed equipment. When so installed, their use in the reasonably near future is expected. Included are such things as extra ducts in underground systems, foundations, and water tunnels for additional units in steam-power stations and scroll cases and draft tubes in hydro stations.

This is property that normally suffers practically no deterioration with the passage of time. If at some future date the street in which the duct line is laid is relocated, as occasionally happens, or the power supply program is radically changed and the advance provisions for future units become useless, the condition of these items, under such circumstances, would drop abruptly from practically 100 per cent to 0 per cent (disregarding possible salvage). Such developments could not have been foreseen long in advance and certainly depreciation has not proceeded uniformly. These instances of lack of uniformity in the incidence of nonphysical causes of retirements, by either retardation or acceleration, might be multiplied, but further illustrations seem unnecessary.

DISREGARDING, for the moment, the foregoing limitations upon existing depreciation and the uniformity of its accrual, let us consider the feasibility of fixing the suggested "ceiling" beyond which such depreciation in a normally well-maintained and operated property will not go. We have seen

that the average property contains at least 20 per cent of items not subject to any depreciation. In the remaining 80 per cent it is obvious that a mature property will have units of all ages, some practically new, others about to be retired.

If the property has not grown during the life of its surviving units the average depreciation of all units will be 50 per cent of this 80 per cent of depreciable property or 40 per cent of the total property. But very few utilities have lacked substantial growth. With such growth there is a larger proportion of comparatively new units than of old ones, and the maximum possible percentage of depreciation is correspondingly reduced. Mathematical analyses, which this writer and others have made, show that, for properties with growth such as the electric power industry has experienced, the maximum possible depreciation would be only 70 per cent of that of a static property. This assuming uniformity in its progress. The maximum is therefore reduced from 40 per cent of the total property to 28 per cent.

THIS 28 per cent must be further reduced by the factors heretofore discussed which have been disregarded in its development. Summarizing them, we find that important parts of large units go through cycles of depreciation and recovery while the remainder of those units continue substantially undepreciated. Other important units as a whole may appear to depreciate only to have their depreciation disappear. We find that 80 per cent of all retired units, or the dollars invested in them, are retired for nonphysical causes which do not develop uniformly and may not be determinable long in advance. Although it is obviously difficult to evaluate all these factors and apply them in logical sequence, efforts to do so indicate that the existing depreciation "ceiling" is probably not far from 50 per cent of the maximum of 28 per cent derived above. It is also about one-half of the reserve requirement as sometimes theoretically computed. It is, on the other hand, appreciably more than the amount usually found by competent appraisal engineers who seek to discover all known causes of depreciation.

This 50 per cent reduction factor applied to the previously derived straight-line depreciation is not merely a matter of broad judgment. It may be supported by a further analysis of a typical property. We have found that in certain items or groups of items in such a property, subject to cyclical depreciation, the parts so affected range from one-sixth to two-thirds of the total cost of the items or groups, in most cases not more than 25 per cent. The remaining parts, not affected by this or other progressive depreciation, make up from five-sixths to one-third of the total cost, averaging at least 75 per cent.

THIS class of property includes slightly less than 40 per cent of the total depreciable property. If it is wholly excluded from the 28 per cent possible depreciation with which we started, a balance of 17 per cent remains for further study. This balance ignores the cyclical depreciation which is operating in minor parts of these items but which periodically is wholly removed, and averages less than 50 per cent of its possible maximum in a

growing property. Its cycles are much shorter, of course, than the useful life of the units with which they are connected.

The remaining adjustments needed before reaching the final ceiling of existing depreciation are less subject to mathematical analysis. Included are the effects, previously referred to, of "negative" depreciation, occurring when a supposedly old unit is given a new lease of life through association with new units. Distribution copper is also a factor because of its stable character and sustained value. In some cases its present salvage value may be greater than its original cost.

An extensive underground conduit system is not adequately provided for in the prior deductions in this computation, nor are some of the characteristics of modern, fireproof buildings used for office, storage, and other purposes. The writer recently visited a building which he operated as a power station thirty-five years ago. It was then about twenty years old. Thirty years ago it ceased to be used for power purposes and was converted, without radical structural changes, into a service building. Although its present age is beyond that commonly assumed for useful life in straight-line depreciation computations, it now shows less signs of deterioration than when it was used as a power station. A final and still less definite factor is the conviction of utility operators, backed by experience, that nonphysical depreciation tends to develop more rapidly in the later years of useful life.

THE net effect of these rather elusive factors is further to reduce the depreciation ceiling below the 17 per cent previously determined. It tends to confirm the statement that existing depreciation from "causes known to be in current operation" is only about one-half that evolved by reserve requirement computations. And it is such depreciation that is recognized by existing law as a factor in rate base determinations. Again, it is conceded that provisions for future retirements from causes now unknown might well be made. A prudent management will consider itself bound to make such provisions, perhaps to an extent substantially exceeding the ceiling herein derived. But, in so doing, it should distinguish between their known and unknown components.

The impulse arises to comment further about useful life; but let us confine our present discussion to one phase to which brief references have already been made. The known facts about useful lives in the past are the only direct evidence we have as to use-

¶ "IN *defining depreciation the new accounting systems include only 'causes which are known to be in current operation,' presumably with appreciation of the meaning of this limitation. A hurricane, a carelessly dropped match, and a drunken driver are not within the category of such causes. While it is prudent to provide for such contingencies, they do not involve depreciation as defined, and they certainly do not accrue uniformly.*"

ful lives in the future, against which provisions are now being made. *If* we were now dealing with the same kinds, sizes, and types of equipment as we have retired in the past, the job would be comparatively simple. Corrections would, of course, be required for property and community growth and changes in the habits and ideals of customers, actual and prospective.

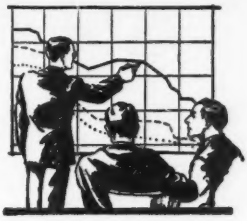
THE "if" does not fit, however. There have been radical changes in a very large proportion of utility equipment and appliances. The purposes of these changes include greater ruggedness and resistance to the exactions of service, easier and simpler repairs and adjustments, added protection against the ravages of lightning, weather, and general deterioration, and improvements in efficiency. These changes have been so far-reaching that only a minor part of electric power property remains unaffected. Most of them have been so recent that we have only negligible records of the retirements of the equipment involved.

Among the things in which important changes have been made in recent years and which have so far yielded no illuminating data on useful life are high-pressure and temperature boilers, turbines, and their auxiliaries which comprise a very large proportion of modern power stations; high permeability, wound core transformers; customers' meters; newer types of street-lighting equipment; lightning arresters; impregnated pine poles (distinguished from butt or surface treated); and types of switching equipment and relays associated with high-voltage transmission. Such items make up more than 50 per cent of the depreciable property in a modern electric power system.

ALTHOUGH the effects of extremely high pressures and temperatures on the life of equipment are still uncertain, it is expected that the larger resulting gains in efficiency will justify any life sacrifices which skillful design cannot overcome. Improvements in lightning arresters have not only prolonged their lives but also those of transformers, meters, and customers' appliances for which they offer much better protection. Without further illustrations, it can be confidently stated that the net effect of these modern designs is to increase useful life, but to an extent not yet determined.

There is the further fact that the units installed in recent years are so much larger, with growth in volume of business, that they cannot economically be "fired" from their jobs because of inadequacy as were many of their predecessors. The recorded lives of the latter may, therefore, be misleading. In other words, past experience with useful lives is not a safe guide for the future. After all possible adjustments and allowances which engineering skill can provide, it is still too unreliable as a basis for reserve requirement computations, particularly if they are intended as a factor in findings of fair value.

THE concluding point in this reserve requirement discussion relates to the assumption that the present, radically changed method of computing annual depreciation should be applied retroactively to all past years in which existing property was in service. Even if we had been reconciled to the



Price Changes over Twenty-five Years

"... the sum of money that would have bought 500 feet of No. 6 weather-proof wire twenty-five yars ago, would have bought 1,500 feet ten years ago, but will buy only 1,000 feet now. These changes have all occurred within the life history of existing lines. Other price changes have been less violent. But their over-all effect introduces a serious error in reserve requirement computations."

straight-line method in all those past years, it is hardly conceivable that present ideas as to useful life would have then prevailed or that any ideas regarding it would have remained stable for any long period of time.

When the utilities were recently required to recast their investment accounts and to separate "original cost" from the rest of the recorded figures, they were emphatically told by regulatory authority that they must accept the original entries, however inconsistent they might be with present accounting methods and even if they were obviously erroneous. The writer recalls a case of the purchase many years ago of an electric property from a local owner who had operated it in combination with an extensive lumber business. When poles were needed for the electric lines they were cut in the near-by timber lands without charge other than possibly for direct labor. These and other errors resulted in an understatement of the "original cost" of this property by about one million dollars. In spite of such situations, it is not permissible to alter past records, at least if they were reasonably consistent with the practices of their time.

THE proposed reserve requirement procedure, with its retroactive application of recently established accounting methods, is directly contrary to and in violation of this definitely prescribed rule. The propriety of past accounting practices is the issue in both cases. In one they are accepted as controlling; in the other they are ignored.

Admittedly, both procedures may assist in the furtherance of certain regulatory or individual aims toward lower rates or other changes in the utility picture. Yet, if either or both are in error, or if they are incon-

sistent with each other, they should not both become established cogs in our regulatory machinery.

The case against the reserve requirement theory as a measure of existing depreciation may be summarized as follows:

(1) It assumes uniformity in the progress of depreciation or loss of usefulness and a corresponding uniformity in loss in value. This is contrary to industry-old experience and the findings of the courts.

(2) It assumes a knowledge of the ages of property units. This is usually unknown except as to certain large units.

(3) It assumes that the ages of large groups of like units can be determined by finding the ages of the dollars invested in them. The age of the dollars is not the same as the age of the property where there have been wide variations in prices, as has been the case in the past.

(4) It assumes a knowledge of the ultimate useful life of present units, based on past experience with units performing like functions but having distinctly unlike characteristics.

(5) It requires a retroactive application of present accounting methods which are widely different from those in effect in past years under full regulatory authority.

(6) It requires a procedure which is directly contrary to and inconsistent with established accounting methods applicable to historical property cost records.

IF the assumptions and reasoning which form the basis of this reserve requirement theory as set forth herein continue to bob up in rate cases in spite of their vulnerability, opportunities for judicial review should be sought without delay. As a practical matter, in the light of the recently proposed "ceiling" on utility rates, any discussion of property values in rate cases would appear to be largely academic, at least for the duration. The application of such theories could serve only to destroy the remaining incentives to efficient operation and continued adequate service in support of the war effort.

The War against Inflation

"IF *excess purchasing power were siphoned off, either through taxation or through government bonds purchased from real savings, no over-all price and wage ceilings would have been necessary. All that would have been needed was selective price fixing and rationing of a few necessities. Yet, by default rather than by any reasoned or deliberate choice, we have been drifting to the alternative course of allowing purchasing power to grow, but trying to counteract its effects by universal ceilings on prices and wages. This is a course which, if persisted in, can only lead to an ever-widening circle of rationing, an ever more thorough and elaborate system of governmental control, ending with a rationing of labor itself and a compulsory freezing of men in particular jobs.*"

—EDITORIAL STATEMENT,
The New York Times.

Democracy and Free Enterprise —In Peace and in War

As admittedly necessary steps are being taken toward centralized control over the nation's economy, this author raises the question as to what steps are being taken or can be taken to insure the preservation of American traditions of free enterprise and democratic privilege now and in the post-war era.

By J. B. HILL
PRESIDENT, LOUISVILLE & NASHVILLE RAILROAD COMPANY

THE present war is uppermost in men's minds. The form of future civilization is at stake. It is more than a group of nations fighting each other; it determines the form of future existence—that is, whether men shall be free under democratic government, where they have a voice in determining its form, or under a dictatorship where no such determination is permitted. In short, whether men shall live under laws which they prescribe or under the will of ruling men—whether free men or slaves.

We of this nation are offering our children and our very all to sustain a government of laws and not of men. Assuming that our cause shall ultimately prevail, albeit after heart-rending sacrifices whose hideous shadows most of us but as yet vaguely discern, it is well now to consider how well democracy has functioned and what in the future may be demanded or can be expected of it.

We may presently ask:

How has democracy functioned in war?

How well did it function in prewar peace times?

Must more be demanded of it to ultimately survive?

Great wars are now international in their scope. Their imminence is generally anticipated by those in high governmental authority long before they are sensed by the general public. This is unavoidable because diplomacy to deal with their problems must frequently be secretly pursued. The action of enemies makes prompt, opposing decisions imperative. Both wise and quick decisions cannot be obtained from the public because it is impossible for the

public to obtain and digest full information on which decisions are based, nor has it the capacity to make wise decisions quickly. Again, information on which decisions must be formed must be withheld from the public as from the enemy. Democratic forms of procedure must necessarily then give way to centralized authority.

THIS has been done in the present war until our Chief Executive has almost unlimited power. Even then the problems are so intricate, so vast, that authority must be delegated to administrative bureaus. These vie with each other for expansion and authority and at best create much confusion and inefficiency. Centralized authority, so delegated in emergencies, is not always effectively used because of the effect on public opinion and resultant political reactions. Witness, for example, the slowness in conversion of our economy from a peace- to war-time basis; the lack of coördination between the Army, Navy, and Air Forces; the feud between Army and Navy and WPB over control of essential war materials; the arguments which ensue over the continuation during war of certain peacetime bureaus and their activities; the pursuit of labor for greater benefits; strikes; excess profits; and many other disturbing factors. These things are mentioned, not primarily as a criticism of our present executive, but to point out a weakness of the democratic process in times of war. Conceivably, the lag between the necessity for decisive action and performance could be so great as to result in disaster. It becomes clear, therefore, that democratic forms in times of war are necessarily discarded because of their inefficiency. Even then the resultant government is frequently far from satisfying.

WHAT about democracy in prewar peace times? Let's briefly view our situation. Those who fostered the Declaration of Independence and fought the Revolutionary War were striving to free themselves from arbitrary power and rule. This is the same principle that urged us into the present fight. Those who wrote the Constitution were somewhat wary of trusting too much the wisdom of the general public. Our representative form of democracy was the result, whereunder certain checks and balances were instituted through a division of control among the legislative, the executive, and the judicial. Many amendments since the original document have resulted in a democratizing process that makes the representatives of government more directly susceptible to mass influence. The direct election of United States Senators, the manner of electing a President, the influence brought on the Supreme Court by Congress and the Chief Executive, the organization of aggressive minorities affecting the actions of legislators, the swapping of local favors by Congressmen—all these things and more have placed the masses more in control of the machinery of government and the direction of its policies.

IN the meantime, the industrial and urban age has replaced the simple problems of rural economy. The enormous growth of business, individual and corporate, the organization of labor, the development of transportation and communication, problems of health, sanitation, education, and the

general welfare, domestic and international, have necessitated administrative bureaus to deal with the immense and complex problems of government. These things are no longer local. The individual voter cannot possibly be well informed on all matters relating to government; they are too difficult and intricate for his necessarily limited understanding. Hence his servants in government are removed from his intelligent appraisal and he selects them on a basis of emotional or partisan appeal rather than on their ability and fitness. Administrative bureaus continually multiply and enlarge and even influence legislation and governmental policy. They may be instituted by but are far removed from direction by the common man. When voting strength between parties is fairly evenly divided, temporary reforms are conducive to abolishing abuses of power. On the other hand, changes in governmental control frequently mean changes in a purposeful policy, which, if government is to be efficient, requires studied and unbroken continuity of effort. Under all conditions, therefore, much unreasoned action is, to put it mildly, predictable.

THE industrial development of this country is greater and has been faster than any place on earth. Even to partially and intelligently control and regulate it through governmental processes requires able and expert talent—unselfish legislators who should have a wide understanding of business and the economy of government which are entrusted to them to direct and control. Rarely is such wisdom in possession of our elected representatives, nor can they obtain it in a too short tenure of office. Worst of all, however, is our casual selection of them. They are, with some notable exceptions, all too often chosen not because of qualities of statesmanship but for the most part on personality, the ability to talk well, a willingness to promise the "have nots" a greater distribution of wealth, a greater security, a more abundant life. Since there are more "have nots" than "haves," the complicated business of government and industry is indirectly, gradually, and sometimes violently succumbing to the paralyzing influence of ignoramus mass control without responsibility. If unchecked it can only mean the destruction of enterprise, the slowing of progress, and ultimately the destruction of democracy itself.

ONE has but to visualize the waste and inefficiency in government, whether it be local, state, or national, to

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realize that dangerous trends are being created. These things were not so vitally important while we were competing in merely a commercial way among ourselves and with other nations. Now, however, the commercial phase is almost supplanted by the competition of war, with preparation for it, with its conduct, with armament production. Our status as free men and as a free nation is at stake. We must be efficient to remain free. We cannot be efficient unless we mend our ways.

Clearly, then, democracies are inefficient in both war and peace. Their survival as presently administered is questioned. One may ask: "Do you favor the substitution of some other form?" Decidedly not. Only under some form of democracy can freedom for the individual exist, and this, above all else, is to be preserved. What I am urging is that we govern ourselves more intelligently and that we require a higher standard of those who represent us. This will demand of us a keener appreciation of the blessings of liberty, a more understanding concept of government, a greater interest in the business of government, and a more unselfish attitude in solving the vexing problems of humanity.

No discussion of democracy can get far without a consideration of private enterprise or the profit motive. Some refer to it as the profit system. More appropriately it is a profit and loss system. We in industry have been but poor salesmen for that system by whatever name called. Although our government's adoption of it has given to the masses more physical comfort, more freedom, more promise for an improved future welfare than any other governmental policy has ever given, still we have let malcontents falsify and abuse it. We have not fought back, but worst of all have not affirmatively and constantly kept its merits before the common man nor imbued our youth with its blessings and promise. Capital is the great creator of our industrial age; it is the power behind the unparalleled progress of our nation during the last century and a half. It is the excess production over consumption which, if applied through research, invention, and ever-increasing technological development, offers promise to improve the lot of the average or common man to a degree but heretofore only distantly approached.

The President has mentioned as a desirable goal the four freedoms: freedom of speech, of worship, freedom from fear, from want. The first two are rights provided by the Constitution and are well understood. The second two are difficult of definition and even more difficult of accomplishment, requiring as they do individual responsibility, obligation, and effort. Again, the second two are affected by the action of our enemies. They also operate in spheres beyond the purpose or mere edict of government which at most should be called upon only to provide equal opportunity to the individual to attain their fulfilment. Others have pointed out the omission from the four freedoms—the all important one, freedom of enterprise, which in the 160 years of this republic's existence has given the world an unparalleled progress. The editor of *Nation's Business* refers to a summation by a great student as follows:

Our rulers can best promote the improve-

Waste and Inefficiency in Government

"ONE has but to visualize the waste and inefficiency in government, whether it be local, state, or national, to realize that dangerous trends are being created. These things were not so vitally important while we were competing in merely a commercial way among ourselves and with other nations. Now, however, the commercial phase is almost supplanted by the competition of war, with preparation for it, with its conduct, with armament production."

ment of the nation by strictly confining themselves to their legitimate duties, by leaving capital to find its most lucrative course, commodities their fair price, industry and intelligence their natural reward, idleness and folly their natural punishment, by maintaining peace, by defending property, by diminishing the price of law, and by observing strict economy in every department of state.

THE scientist is telling us that the exigencies of war have created pressures and sped development to such a degree that he is now looking back on 1940 as antiquity. He is asking for all the freedoms which will enable him to banish waste and enthrone efficiency and thus do more to better the lot of mankind than the self-styled labor leaders, the starry-eyed reformers, and government uplifters, past, present, and future, all rolled into one.

Oh, what promise and wonders the future holds if representative democracy can only be saved and free men can continue their upward progress!

Only, however, under a democracy where freedom and opportunity stimulate and reward the initiative and ability of each and every individual according to his merit, can we hope for such progress and the highest good to mankind in general.

All leaders of men must realize these truths. They must teach the masses, and must themselves squarely live up to the principle that there should be no harmful conflict between capital and labor, but that both are as essential and complementary to each other as power to the machine.

WHEN this ghastly war is over, the problems of peace and reconstruction will test the probability of men remaining free and the ultimate

progress of our nation and its peoples. Clear it is, however, that democracy to survive must function more efficiently, and capitalism or private enterprise to survive must have its merit better understood and appreciated by the masses. If the creation and distribution of wealth prior to the New Deal were sound in principle and need only improvement without radical change, that fact must be made clear to the masses. If there be a better democratic method, its understanding and adoption cannot be too long delayed.

These are the problems of leadership and on businessmen in general rests the fateful responsibility to light the way to their solution.

JUST a word about railroads under our democracy. They have in recent years not fared so well. Whether this be the result of sins of omission or commission, the activities of political demagogues, new competitive forms of transportation, or other causes, need not be determined here. Sufficient it is to say that their present affluence is temporary and wholly the result of war traffic. With the ending of the war, their competition promises to be greater and better organized, and their problems magnified. Undeniably they have proven their necessity and worth during war. They will remain also essential in times of peace, whether privately or governmentally owned or operated, and whether their essentiality is so readily apparent. Railroad managers likewise have done a poor job in selling the merits of our industry to the public.

We have done even worse in our labor relations. Not only must we aspire to and deserve a higher place in public opinion but with labor leaders and our employees we must try to prove such mutuality of interest as will sustain us as a private enterprise against government ownership and control and in competition with strong and rapidly growing adversaries.

Anti-inflation Weapon

"TAXES *cannot, by themselves, win the battle against inflation. The battle must be fought with determined and coördinated effort on many fronts. Taxation can be fully effective in this battle only if it is accompanied by restraint and self-denial in other fields. Nevertheless, taxation by itself can make the price situation more controllable and less dangerous than it otherwise would be, and it is an essential anti-inflationary weapon that must be used to the utmost.*

"Inflation has been well described as 'the ruthless process whereby sacrifice is imposed inequitably upon a people who have lacked the unity, the courage, and intelligence to impose that sacrifice equitably upon themselves.' It is for us to show that we have the unity, the courage, and the intelligence to check inflation now."

—HENRY MORGENTHAU,
Secretary of the Treasury.

A Plea for the Stockholder

Dangers which would arise, in the opinion of the author, in simplification of capital structures from any general application of the SEC "Jacksonville Gas formula," resulting in the elimination of the common shareholder's interest on the theory that it is "wholly without equity."

By HARRY H. FRANK

THE initial steps marking the beginning of great revolutions frequently are taken unobserved. This is the observation of a thoughtful historian of political revolutions. The same observation may be made with respect to important departures in the law.

New ideas develop and new methods are proposed, but it is not until they are adopted in some form that their advantages appear. Once their advantages become apparent the applicability of the new method or plan to many other situations immediately becomes apparent and results in a wide and general application of a rule or method originally used only as a new departure in special circumstances.

It is thought that the foregoing observations derive special force from the immediate effects springing out of the recent decision by Judge Louie W. Strum of the Federal court in Florida in the matter of Jacksonville Gas Company and American Gas & Power Company,[1] (S.D. Fla.). The Jacksonville Gas Company, in operation in its locality for more than a generation, and at one time the principal instrumentality for its kind of service to the district in and about Jacksonville, encountered early competition from the then newer electric companies. It apparently never seemed able to adapt itself to the new form of power and light developments.

At any rate, for years that company, either by reason of its adherence to its own original methods, its character of management, or its financial structure, found itself in difficulties and with an ever-increasing load of obligations. Its managers, stockholders, and directors attempted on their own initiative to find ways and means of escaping from the effects of their overloaded capital structure. Failure along this line on their part finally led to the application of the company for relief under what was at the time supposed to be a revolu-

[1] 45 PUR(NS) 193 (digested in PUBLIC UTILITIES FORTNIGHTLY, Oct. 8, 1942, p. 523.)

tionary procedure, and certainly was a new idea—the method provided for debtors in difficulties by § 77-B of the Bankruptcy Act.

IN 1935 the Jacksonville Gas Company proceeded to become reorganized under § 77-B, but even after that drastic operation did not appear to be able to struggle under its load and meet the effect of the competition of the electric companies, which were ever a threat against its continued existence.

In these circumstances the company, on its own initiative, and on its own behalf, filed an application with the Securities and Exchange Commission for relief. It did this apparently because after considering § 11(e) of the Public Utility Holding Company Act of 1935 and § 11(b) of the same act, it came to the conclusion and was advised that the provisions of this act afforded a quick, inexpensive, and comprehensive method. This method was believed to be far in advance of the remedies afforded under § 77-B of the Bankruptcy Act (which in its experience had failed to prove satisfactory). It decided again to reorganize and this time to make a drastic cut in fixed obligations, so that its basic capitalization would bear a more definite relationship to its assets and to the earning power of the company. It hoped for a freer financial structure leading to some adequate return upon the amount of capital found to be actually at work in the company.[2]

THE plan proposed provided for the formation of a new corporation with the capitalization of earning power of the property as the basis of valuation for the reorganized company. The commission set the earning power of the company, before payment of Federal taxes, at $210,000 annually, and upon this income, capitalized at 8 per cent, reached a valuation of the company of $2,625,000, compared with a total capitalization and book surplus of $6,161,557.

The plan approved provided that the new company would issue to the present company $1,745,000 (50 per cent of the present principal) first mortgage 5 per cent bonds and 36,448 shares of common stock (par value $25 per share) carrying the voting power of the new company. All of the new bonds and 34,900 shares (95.76 per cent) of the new common stock went to the first mortgage bondholders of the old company, while 4.24 per cent of the new stock was distributed to the holders of the debentures and income notes in the old company. Nothing went to the old common stockholders.

When the application of the company was filed with the Securities and Exchange Commission the whole situation surrounding the company's financial structure was apparently thoroughly canvassed by the various counsel of distinction. These appeared not only for the commission but for the company and for what may be termed its holding company, the American Gas &

[2] The facts of the Jacksonville Gas Company Case briefly are as follows: The commission had before it a company whose long-term debt aggregated $5,498,231, about twice the actual value of its assets. In fact, the first mortgage holders had coming to them alone nearly twice the actual value of the company. The commission found that the holders of the common stock of the company were wholly without equity since they were in the fourth level down from those having first call on the assets. The commission, in order to effect a swift and economic redistribution of the voting powers in the creditors, whom it found to be the real owners, approved the plan proposed by the company.

Power Company, and for the trustees under its first mortgage, the trustees for subsequent debentures issues, and, lastly, the stockholders of the utility company.

ANYONE who even gives a cursory reading to the exhaustive and thoughtful findings and opinion of the commission will realize that the commission itself reached the conclusion that the application of the Jacksonville Gas Company opened up a new vista in the field of corporate reorganization, at least in so far as utility companies are concerned.

The reasoning of the commission was, briefly, as follows:

Section 11(a) of the act makes it a duty of the commission to examine the corporate structure "of every registered holding company and subsidiary company" to determine "the extent to which the corporate structure of such holding company system and the companies therein may be simplified . . . (and) voting power fairly and equitably distributed among the holders of securities thereof . . . " appropriate to the operation of an integrated public utility system.

After discussing the findings of various appraisers, the commission, even in a generous treatment of findings, was forced to the conclusion that the assets of the company were in the neighborhood of 50 per cent under its secured indebtedness and this on the basis of an adequate interest return. The commission reasoned that there should be a drastic reduction in the amounts of all fixed charges and a redistribution of control and management, now the results of common stock voting power and control. To effectuate this purpose the commission reasoned that a new corporation should be formed, new securities issued and distributed in an amount to represent the real value of the securities outstanding; that the common stockholders be deprived of their stock and voting power; and that that voting power be placed with the security holders in such form that they could not, by redistribution of stock, bring about again the evils which the commission found had resulted in the financial distress of the company.

AS the commission expressed it, "a mere shift of voting control to the senior security holders, leaving the existing capitalization unchanged, would leave outstanding a common stock with neither value nor voting power, and debt securities which could never be paid off. Such a shift, leaving the existing capital structure intact, would do only part of the job required by § 11."

¶ *". . . the Jacksonville Gas Company Case establishes a plan whereby an administrative agency, after a full and open hearing, may submit to a Federal court a plan of reorganization reducing the indebtedness of a company to inject value into its stock and then redistributing that stock so that the creditors, whom the commission finds to be the real owners, replace the stockholders, found to be wholly without equity."*

Thus the Jacksonville Gas Company Case establishes a plan whereby an administrative agency, after full and open hearing, may submit to a Federal court a plan of reorganization reducing the indebtedness of a company to inject value into its stock and then redistributing that stock so that the creditors, whom the commission finds to be the real owners, replace the stockholders, found to be wholly without equity.

Judge Strum, speaking for the Federal court for the southern district of Florida, followed the reasoning of the commission and upheld the plan which it had approved, and thus passed a milestone on the road to the development of the law affecting public utility companies, particularly with respect to the Holding Company Act of 1935.

It will doubtless be agreed that the Jacksonville Gas Company Case presented in all its features a unique case calling for the relief afforded it by the plan approved by the commission. The company, it was found, had in reality only about 50 per cent in actual assets of even its first lien obligations, with no prospect of being able to earn accretions or even earn enough to pay its current obligations and interest charges; and under the circumstances it is not to be wondered that the commission and the court found no difficulty in holding that the common stockholders had no real interest in the company.

However, in doing so the commission and the court used language which might be said to indicate that the common stockholders, at least of utility companies, received but scant consideration.

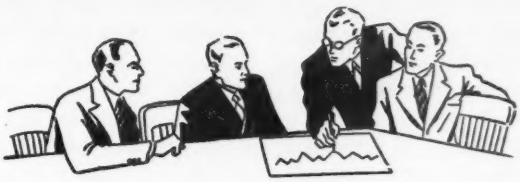
The term used was "wholly without equity."

But what may have been a very proper finding with respect to the common stock and its voting power in the decision with respect to the Jacksonville Gas Company should not, however, go unchallenged or at least unremarked. This is because of the implications which may flow out of the decision in this case respecting the character and value of common stock and the rights of the stockholders.

The importance of keeping in view what rights the ownership of common stock carries with it is emphasized by the prompt and widespread attention which the so-called "Jacksonville Gas formula" received in regulatory circles. No sooner was the decision in the Jacksonville Gas Company Case publicized than observations began to circulate about the plan being so efficacious in its peculiar circumstances. Inevitably, the possibility of applying the "formula" to every other company, whether operating as a public utility (and, therefore, within the jurisdiction of the Securities and Exchange Commission), or whether it was an ordinary business corporation, was suggested. Enthusiasts seized upon it as a new panacea for the business world generally.

Within the short space of time which has elapsed since the decision of Judge Strum in the Jacksonville Case, proposals are being made to Congress that the "formula" should be included in machinery for post-war aid and plans for the reorganization of business corporations in the United States.

The business world generally should weigh this agitation carefully. Needless to say, that goes double for utility organizations. In a



Need of Original Stock Investment

"HAVE we reached a point in the evolution of business developed in the United States that we have no more need of original stock investment? Can we really afford to slam the door in the face of 'risk' capital? To answer 'yes' to these questions is tantamount to saying that American enterprise has passed its zenith—that contraction rather than expansion will be the order of the future."

word, the Jacksonville "formula" is *not* always advisable. Perhaps it is only feasible when applied under the aegis of a commission. To establish a plan whereby small business houses may propose to a court the revamping of their special structure, and whereby they may hand over to the lien holders the property of the company and its management, and wipe out all of the value of the common stock and take away from the common stockholder his property, is fraught with multiple dangers. Not only the investor immediately involved but general public interest in responsible and efficient management of private enterprise is at stake.

To put such a plan as this in operation would be to lose sight of the origin of traditionally American business enterprise. It is the common stockholder who frequently builds up a business to a point where its expansion requires that he give a first lien to the capitalist for the money necessary for his enterprise. It is the common stockholder who comes forward with his new invention or device and in exchange for the loan of capital to himself takes the common stock in lieu of other securities. It is he who has the courage and confidence to look to the future for an adequate return on his property. He only wishes to continue to have control and management to the end that he may be able to work it out.

THE bondholder who lends credit to these business companies, taking the lien of a mortgage on the properties of the company, does so with his eyes open and only after considerable and careful investigation of the assets and calculation of future profits. He should be said to be taking the same speculative risk with respect to the enterprise as the common stockholder himself, and certainly it is fair to say that in making the loan he impliedly agrees that the voting power will remain in the common stockholder and

the control and management of the company will be in his hands.

In this respect, at least, his equity rises no higher than the common stockholder. What the common stockholder really has is the ultimate ownership of the property—the right to manage it, and, incident to that right, the sole right of a voting power. It is well to consider, therefore, what a revolutionary step is involved in the proposals now being made to Congress seeking a solution to the financial woes of corporations hit by the war. It would mean an inundating wave of conservative "mortgage management" washing out the holdings of more imaginative original entrepreneurs. It would mean an epidemic of "banker control." Will the uncertainties and difficulties of post-war business operation require a more courageous type of industrial leadership than such a consolidation and, perhaps, concentration of capital holdings will be able to supply?

EVEN in the Jacksonville Gas Case a considerable argument might be advanced with respect to those common stockholders whose rights are completely destroyed by the plan put into force. They bought the common stock as citizens of Jacksonville, relying upon the fact that the company would continue to operate and at least that they might continue to have the hope that some time the management would make their common stock of considerable value.

One is inclined to the thought that because it happened that a holding company, subject to the jurisdiction of the Securities and Exchange Commission, owned 50 per cent of the common stock and was willing to admit that it had no value, other individual common stockholders (some of whom possibly were not even represented in the hearing) were the more readily deprived of their interest. They were foreclosed by the statement that the common stock was "wholly without equity." After all, the stockholders had invested their money in that common stock. It represented property as well as the potentiality of a voice in the affairs of a company. Of course, in a situation such as the Jacksonville Gas Company, where 50 per cent of the stock of the company was owned by a holding company, it would be readily admitted that a potential voice in the affairs of the company possible to individual stockholders nearly approached zero. Yet the stock had some value to them.

THE tendency in recent years (and certainly under the decisions of the Bankruptcy Court in reorganization under 77-B) is to treat with scant consideration the rights of common stockholders. If the Jacksonville formula is adopted as a general plan affecting all corporations, it would seem that the demise of the common stockholder would be speedy and certain.

Have we reached a point in the evolution of business developed in the United States that we have no more need of original stock investment? Can we really afford to slam the door in the face of "risk" capital? To answer "yes" to these questions is tantamount to saying that American enterprise has passed its zenith—that contraction rather than expansion will be the order of the future. Is this the sort of faith we should have in America? Is this what we are fighting for?

The question should be asked: Would it be economically sound to adopt such a speedy and drastic remedy with regard to business generally throughout the United States? Would it not open the door to all sorts of frauds on common stockholders? For instance: In the practical conduct of a corporation a small minority of the outstanding stock commonly elects the directors and runs the company. Such a small minority could readily, in collusion with the lien holders, put through a plan to wipe out all of the common stock on the theory of revamping the company.

THUS not only the property of the common stockholder but the confidence of the general public in common stock as an investment could be destroyed. Thus, mismanagement and exploitation of the common stockholder by a management having a small investment in common stock of the company, working with or misled by the company's creditors, could wrest control from the stockholders to its creditors. The old-time exploitation of common stockholders so easily disguised as "mistakes of business judgment" might rise again with renewed boldness to plague the investing public. Indeed, investors might even discover, in some cases, that the old-fashioned "honest" errors of management had been liquidated in favor of a management not quite so innocent in its mistakes.

It is feared that under war-born pressure an adequate opportunity may not be given for a proper consideration of these proposals. It is to be hoped that such proposals will not take the form of legislation without full hearings, with the opportunity of every interest to be represented at such hearings, and that every angle and phase of the question be thoroughly explored and the whole situation canvassed. The Jacksonville formula has a revolutionary aspect, certainly as applied to business concerns generally. It is a departure from the old theory of the Bankruptcy Act which, while it may be somewhat dilatory and cumbersome, yet has behind it a wealth of years of experience and judicial ruling. It may be that a plan which is found to be quick and effective when worked out by an experienced and cautious regulatory commission would operate quite differently from a plan concocted by various corporations throughout the country and presented on their own behalf to the courts.

"WHILE *the post-war world will need security, safety, promotion of the general welfare—things for which government may be relied on—what will be needed most will be those concomitants of liberty of human action: initiative, pioneering spirit, daring, risk-taking, enterprise, and the other contributions of the individual stirred to creative action. These are not products of government; they grow only out of private enterprise.*

"A growing recognition of the need for improved management techniques supplies one of the few hopeful features of a disordered world. If private enterprise is stirred to action and stimulated to exercise those skills in management of which it is capable, there is some hope for recreation of at least part of the loss which this war makes inevitable."

—PAUL T. CHERINGTON,
Partner, McKinsey & Co.

Wire and Wireless Communication

On the first regular business day since long-distance telephone calls became subject to priority rating, the New York Telephone Company received priority requests on November 2nd on 33 calls originating in the city of New York, but in no case was it necessary to cut off a nonpriority call already in progress.

In reporting these figures, a telephone company representative expressed doubt that the long-distance service out of New York would be very greatly affected by the priority system which became effective on November 1st, by order of the Board of War Communications.

As reason for his opinion, he pointed out that on the whole, day in and day out, the city's long-distance boards—geared to a daily average of 57,000 outgoing calls—are able to handle even the war-increased volume of calls without much delay, if any. Also, the public has helped by observing company requests to cut out trivial calls, and to try to make necessary private calls in the off-peak hours—noon to 2 P. M., 5 to 7 P. M., and 9 P. M. to 9 A. M.

The 33 priority calls in New York city on November 2nd were stipulated by the callers as meriting No. 2 or No. 3 priority, which simply meant that they went to the head of the waiting list, if any, on their circuits. No. 2 priority calls require "immediate" completion for furtherance of national security or the war effort. No. 3 calls are the same, with the word "prompt" substituted for "immediate."

No. 1 priority calls—for the completion of which any but another No. 1 call may be interrupted immediately—involve disasters, enemy danger, urgent troop movements, etc.

Among those having the right to ask for telephone priority are the President, Vice President, Cabinet officers, members of Congress, Army, Navy, aircraft warning service, all public officials, foreign consular and diplomatic officers, civil defense forces, Red Cross, newspapers, press associations and communications, utility and transportation industries, and any essential war industries.

The burden of asking for priority is on the caller. No caller is asked to state his priority, but when a caller does ask for one, the company accepts it without challenge. However, each month the names of callers and the priorities they requested are reported to the Board of War Communications, and violators are subject to punishment.

As one means of impressing upon people the need for cutting down private long-distance calls to busy spots, the telephone company is checking in red the items listing the cost of such a call on a subscriber's bill. Along with the red-checked bill comes a printed form reminding the subscriber of the drive to cut down long-distance calls.

* * * *

Not all the heroes in the United Nations' Solomon islands' invasion

are in the front lines manning guns and trading lead with the Japanese; many are in the Signal Corps. It's the job of the Signal Corps and communications personnel in the units to maintain communication between all troops based in the Solomons, and on their shoulders falls the task of laying telephone wires —sometimes under direct fire— repairing installations which in many cases have been deliberately destroyed by the enemy, and installing and operating both radio and telephone equipment.

The Signal officer on Guadalcanal is Lieutenant Colonel Edward Snedeker of Greenville, North Carolina, and Benkelman, Nebraska. It was one of Colonel Snedeker's men, Private James D. Roberts, former Tiptonville, Tennessee, linotype operator, who performed outstanding work even for the Signal Corps.

Private Roberts has stuck to his switchboard through every shelling and bombing and was at his board recently when a 500-pound bomb fell just outside the telephone exchange. Shrapnel from the bomb sprayed his board and one splinter severed a cord Roberts was about to plug in. As he reached for another line it came apart in his hand, having also been cut by the shrapnel.

"I guess the reason I didn't move was because I was too scared," the twenty-year-old Marine said in explaining how he manned the board even after his narrow escape.

Private Roberts was at his post in a dugout when a Japanese night attack was aimed at the post.

"There was a machine gun mounted atop our sand-bagged dugout and the Japs shot a rifle grenade into it, destroying the position and killing one of the gunners. We could feel the explosion in the dugout and hear the sniping and explosion of the mortars and grenades outside. I thought the Japs were coming right in the door so we posted armed guards just inside the door, draped a blanket over the key to keep the light from shining outside, and awaited the attack."

The next thing Roberts heard was the patter of running feet above the dugout and despite the fact that death or capture was imminent, he stayed at the board putting calls through without interruption. The people heard on the roof were Marines, however, who were replacing the damaged unit and the Japanese never got close to the dugout.

ONE member of the Signal company was killed during a bombing raid when a bomb damaged the radio shack. Despite the damage to equipment by the raid, Marine Lieutenant Sanford B. Hunt, Jr., former Newark, New Jersey, newspaper reporter and officer in charge of the radio equipment, had Guadalcanal back in radio contact with the outside world within ten minutes. The bombing caused the first break in the steady flow of communications since the Marines landed on August 7th.

It was the heroism of Corporal Walter J. Burak of Pittsburgh, Pennsylvania, that enabled the raider battalion to withdraw from its advance position during a Japanese night attack in which an entire company of Marine raiders was cut off from communication with the main body of troops. Corporal Burak reëstablished communication by relaying 200 yards of telephone wire which the Japanese had cut. He crawled along the ridge under constant enemy sniper and light machine gun fire, dragging the roll of wire behind him. His feat enabled the company to direct an artillery barrage that halted an enemy attack on the position and allowed it to retire to a new position successfully.

* * * *

THE future of the extensive telephone systems by which horse-race bookmakers do the greatest part of their business began to look precarious recently as Mayor Fiorello H. LaGuardia disclosed that a plan had been worked out with the New York Telephone Company to disconnect the gamblers' service.

The plan, the mayor said, after a visit to city hall by James W. Hubbell, telephone company president, calls for the police department to certify to the company that certain telephones are being

used for unlawful business, and for the company then to unplug the telephones.

The mayor indicated that both the police department and the company expected to act on this with the greatest speed. Mr. Hubbell was not available for comment at the time, but the company had stated that it would disconnect gamblers' telephones the moment the city officially requested it.

The New York Telephone Company had previously asserted that it does not ask or want business from the organized gambling industry, and that it will "continue" a policy of refusing service to and revoking service from bookmaking establishments whenever asked to do so by law-enforcement authorities.

The company's statement was a reply to Mayor LaGuardia, who on November 1st threatened to go to the company's directors and stockholders unless he got "more coöperation" in the matter of stripping big bookmakers of the telephone service so essential to their business operations. The statement said:

> In an effort to control unlawful use of telephone service it has been and will continue to be the practice of the telephone company to coöperate with the mayor and the police department in refusing service or in promptly disconnecting service already installed whenever requested to do so by the law-enforcement authorities.
>
> It must be recognized, however, that the company does not possess police powers either of investigation or law enforcement; that it is not possible to know the purpose to which every telephone installation may be put; and that in the absence of information indicating the facilities are to be used for illegal purposes the company is obliged by law to provide service without discrimination.
>
> The company does not seek or wish the type of business to which the mayor referred in his radio address yesterday.

In his broadcast to the people on November 1st, Mayor LaGuardia said:

> The more I get into this thing (investigation of gambling) the more I wonder if it is possible for such vast, extensive, complicated telephone service set-ups as have been found operating under these tin horns and gamblers and criminals and thieves to be operating without the knowledge of the New York Telephone Company.

THE Board of War Communications on November 5th ordered telegraph companies to refuse felicitation and congratulatory messages and to discontinue all nontelegraphic services beginning December 15th in a series of steps to gear the domestic telegraphic industry more closely to the war effort.

The BWC acted on information supplied it through an investigation conducted by the Federal Communications Commission. The BWC order provided:

1. That the "office drag" (the interval between the time a message reaches the operating room and the completion of transmission) must not average more than seven minutes for at least 95 per cent of all messages received at the office and in no case among the 95 per cent may the "drag" exceed fifteen minutes.

2. Present routing times for business messages to be delivered by messenger must be reduced by one-third.

3. The FCC was authorized to develop a plan for revising the present priority system for handling urgent essential traffic, both governmental and nongovernmental, and to report on it to BWC.

4. The FCC was asked to prepare standards of minimum use to control present and future installations of teleprinter equipment for telegraphic users.

5. The FCC was requested to "formulate basic principles for regulating the present and future leasing of telegraphic circuits to the end that no needed facilities shall be used for nonessential purposes."

6. The FCC was requested to study the possibilities for eliminating unnecessary circuits, facilities, and offices.

7. The FCC was requested to develop a plan for curtailment of the use of franks and deadhead messages and the elimination of "free service" messages.

The portion of the order calling for discontinuance of nontelegraphic services said that it included messenger, errand, distribution, remittance, instalment payment, and shopping service sale of travelers' checks, sale of mail money orders, and acceptance of express packages.

THE order referring to discontinuance of felicitation messages said that it included greetings for Christmas, New Year, Easter, Father's day, Jewish New Year, Mother's day, Thanksgiving, Valentine's day, congratulations on the birth of a child, graduations, weddings, anniversaries, and birthdays.

An exception was made for such messages when addressed to American Expeditionary Forces.

In addition, the board said it would receive objections to the order discontinuing nontelegraphic services and felicitation messages up to November 25th.

The FCC was ordered to report to the board every three months upon "the current state of service being rendered by the telegraph industry, together with any recommendations for improvement of such service in the interest of the war effort."

The BWC prefaced its order with the statement that it had determined "that the national defense and security and the successful conduct of the war demand that immediate steps be taken to the end that the domestic telegraph industry shall be more closely geared to the war effort."

* * * *

SHORT-WAVE broadcasters felt little change in their routines on November 2nd as the facilities of 10 short-wave stations swung into operation under government lease. The biggest change was in shuffling schedules to meet the coincident ending of summer time in some of the occupied countries of Europe.

Two-thirds of the time leased from the 5 companies operating the 10 stations will be used by the Office of War Information's overseas division, headed by Robert E. Sherwood, and the remaining time will be used by the information department of the Office of the Coördinator of Inter-American Affairs, headed by Wallace K. Harrison, which will broadcast programs to Latin American countries, according to an announcement by both offices on October 31st.

The facilities of the 10 stations will serve as a nucleus in the government's expanded program of short-wave broadcasting which calls for the construction of 22 new short-wave transmitters.

Under the terms of the government lease, the broadcasters are to continue operating their facilities, without profit, in return for which the government will pay the cost of operations.

The government has arranged to build up certain of its short-wave programs in collaboration with the programming staffs of the Columbia Broadcasting System and the National Broadcasting Company, but program changes were expected to be gradual.

John F. Royal, vice president of NBC, said that "our contracts call for five years' lease, but may be canceled by the government before that period." The contracts for the leasing of the transmitters have been signed by NBC, he said, and "we agreed to start working on program coördination at once while we continued to work out details of the programming contract."

* * * *

STRIKING telephone workers were mobilized November 2nd and told either to work or be charged with "deserting in war time."

The strikers were employed by the Anglo-Portuguese Telephone Company, which has a monopoly in Lisbon and a 30-mile radius. They were placed under control of the military and were subject to the heaviest war-time penalty if they failed to resume service immediately.

* * * *

THE 10,000 members of the Oregon Federation of Women's Organizations, who like to talk as much as anyone, have decided to make a real sacrifice. They recently voted unanimously to use their telephones only for "essential" calls.

* * * *

SMALL local telephone companies serving less than 500 stations are exempt from filing complete data required by the Office of Price Administration under its recent regulation covering all proposed rate increases by public utility companies and common carriers.

Financial News and Comment

By OWEN ELY

Estimated 1942 Decline in Earnings Reduced One-half by Final Tax Bill

REFERRING to the earnings table in the previous issue (page 730), the tabulation was continued on our regular monthly basis for convenient reference, but some of the figures may be subject to sharp revision as many companies change their earnings' statements to the tax basis embodied in the final 1942 law, which was much less drastic in its effects than the previous House bill.

Based on the House bill, it is estimated that the average electric power company would earn about one-quarter less for its preferred stockholders, and one-third less for its common stockholders, this year as compared with last; but under the provisions of the final law (which included a reduction in the normal and surtax rate from 45 to 40 per cent, and a credit of the surtax on preferred dividends paid), these declines will be approximately cut in half. The estimates in the accompanying table were prepared by Standard & Poor's Corporation.

EARNINGS OF COMPANIES REPRESENTING 75 PER CENT OF THE ELECTRIC POWER INDUSTRY

	Actual Earnings 1941 (Mill.)	Estimated 1942* Actual Under House Bill** Amount (Mill.)	Per Cent Change From 1941	Estimated 1942* Under Final Law*** Amount (Mill.)	Per Cent Change From 1941
Net income before Federal income taxes	$619.8	$628.5	+1.4%	$628.5	+1.4%
Excess profit taxes	47.9	71.8	+50.0	71.8	+50.0
Federal income taxes	179.7	260.7	+45.0	213.2	+18.6
Net income	392.2	296.0	—24.5	343.5	—12.4
Preferred dividends	116.3	116.3	....	116.3	....
Balance for common	275.9	179.7	—34.8	227.2	—17.6

*Estimates give no effect to possible savings from filing consolidated returns, from the provision for post-war fund, or from debt retirement at discounts.
**Based on 45 per cent normal and surtax rate; and 90 per cent excess profits tax rate.
***Based on 40 per cent normal and surtax rate, 90 per cent excess profits tax rate, and credit of surtax (16 per cent) on preferred dividends paid.

Omnibus Corporation

(Sixth of a series of brief articles on transit companies.)

OMNIBUS Corporation (originally incorporated in 1923 as the Chicago Motor Coach Corporation) is a holding company owning the entire capital stock of the Chicago Motor Coach, about 92 per cent of Fifth Avenue Coach, and nearly 50 per cent of New York City Omnibus. The system operates bus lines in New York and Chicago. The investment in the Gray Line Sight-Seeing Company of Chicago was sold at the end of 1940. Investments were carried as follows in the 1941 balance sheet:

Chicago Motor Coach	$2,750,000
Fifth Avenue Coach	8,371,563
New York City Omnibus	6,826,759

The company owes the Fifth Avenue Coach $4,499,865. On October 13th it was reported that an agreement had been reached with the minority stockholders of the Fifth Avenue Coach. Each share of the latter would receive in exchange 1 share of New York City Omnibus and 1¼ shares of Omnibus Corporation. A motion was to be made in the state supreme court at New York for approval of the exchange as fair and reasonable.

Omnibus Corporation pays out about all that it receives from the three subsidiaries; cash and receivables at the end of last year were roughly equal to the current liabilities, including dividends payable. Capitalization consists of 61,991 shares of $8 preferred stock (convertible into 3 shares of common), on which dividends have been regularly paid; and 624,383 shares of common stock, on which dividends have been paid during 1937-41.

In 1941 the company received $437,500 in dividends from the Chicago Motor Coach, $545,832 from New York City Omnibus, and $331,831 from Fifth Avenue Coach, but the latter amount was credited to reserve for investment in New York City Omnibus. (In previous years it had been credited to earnings, but "dividends received in excess of net equity in subsidiaries' earnings" were deducted in earlier years.) Earnings and dividends on the common stock have been as follows in recent years:

	Earned per Share†	*Dividends*
1942 (twelve months ended 6/30	$ .21	*
1941	.41	$ .30
1940	1.87	1.20
1939	2.01	1.20
1938	2.04	1.30
1937	2.47	1.80
1936	D.06	Nil

†Parent company, nonconsolidated.
*No common dividends paid since June 30, 1941.

During 1940-41 the Fifth Avenue Coach Company paid out dividends substantially in excess of earnings, the deficit after dividends in 1940 amounting to $430,361 and in 1941 to $594,588. However, the company still had net current assets (largely in cash) of $802,933 at the end of 1941.

New York City Omnibus on the other hand has paid out less than its earnings, retaining surplus net income of $171,622 in 1940 and $239,169 in 1941. That company's cash position at the end of 1941 was only fair, however, net current assets amounting to $63,147. New York City Omnibus controls two separately operated subsidiaries, Eighth Avenue Coach and Madison Avenue Coach, both of which declared dividends in excess of net income in 1940-41 (June 30th years).

Chicago Motor Coach also had a surplus after dividends, amounting to $107,527 in 1940 and $151,955 in 1941. However, the company had a weak current position at the end of 1941, current liabilities exceeding current assets by $229,248.

New York City Omnibus, as indicated above, has a slight majority of its common stock outstanding in the hands of the public, though it is effectively controlled by Omnibus Corporation. For the twelve months ended June 30th, $3.50 a share was earned and for the calendar year 1941, $3.27. In 1941, $2.25 a share was paid in dividends and this year $1.50 has been paid to date with the probability of another 50-cent declaration around the end of November.

Omnibus Corporation is currently selling around 4 on the New York Stock Exchange (range this year 6¼-2¼) and New York City Omnibus at 14 (range 15⅞-10¼). With continuation of the 50-cent quarterly dividend rate, the latter yields over 14 per cent.

New York City Omnibus has obviously not shared to any great extent in the earnings gains of the transit industry, presumably because New York city has been less favored with war business than some other cities. However, third-quarter earnings showed a moderate gain over last year (70 cents *v.* 62 cents).

Under a franchise agreement, the city can buy the company's property and equipment in 1945, if desired, on indemnity payments to be mutually agreed on,

as provided in the recapture contract. Current earnings statements do not deduct the charge under the recapture contract. Considering the current price of the stock, it is thought that stockholders should not be adversely affected if the contract were put into effect in 1945.

Basically the system picture appears sound and the fact that the company's securities seem to lack market appeal at the moment, as compared with some other traction issues, may be due in part to the rather confused accounting picture. There may also be some apprehension regarding the impact of Federal regulations as to tires, gasoline, and bus operations generally, though thus far the local transit companies do not seem to have suffered. The Federal authorities recently ordered a general 15 per cent cut in bus mileage; this might be construed favorably, as permitting a cut in operating expenses, except that on some New York city bus routes traffic may be lost to subway or trolley lines if passengers have to wait too long for busses.

The New York city subway system may, it is currently reported, grant a $1,000,000 increase in pay and this has raised the question of an increased fare. However, a special law has been enacted by the legislature which requires a popular referendum, hence the fare question is still very much of a political "hot potato," and it seems dubious whether the present universal nickel fare will be raised by the New York city transit companies.

Associated Gas Compromise Plan

ONE of the complications in the Associated Gas integration picture has been the question of the relative rights of the bondholders in the two top companies, AGECO and AGECORP. Technically, AGECO bondholders had a very poor claim on system assets since their holdings in AGECORP (which in turn controls all subholding companies) consisted merely of bonds junior to those held by the public, and stock (the latter being obviously worthless). However, the attorneys representing AGECO debentures have put up a strong fight for reopening of the Hopson "recap" plan of 1933. Voluminous testimony was taken, but the court encouraged representatives of both bondholders' groups to seek a compromise, since otherwise litigation threatened to continue for years. A compromise plan was devised and presented to the court on November 9th by the trustees of both companies.

Recognition was given to the prior position of the claims of Associated Gas & Electric Corporation 8 per cent bonds of 1940, entitling them to approximately 102.5 per cent of their principal amount. Other claims would participate relatively, as indicated in column one of the following table, based upon a hypothetical new capital set-up for the Associated system to facilitate the compromise. (Each unit of Associated Gas & Electric Corporation income debentures of 1978 would be entitled to approximately "one unit" under the new set-up, and hence this issue is taken as 100 per cent.)

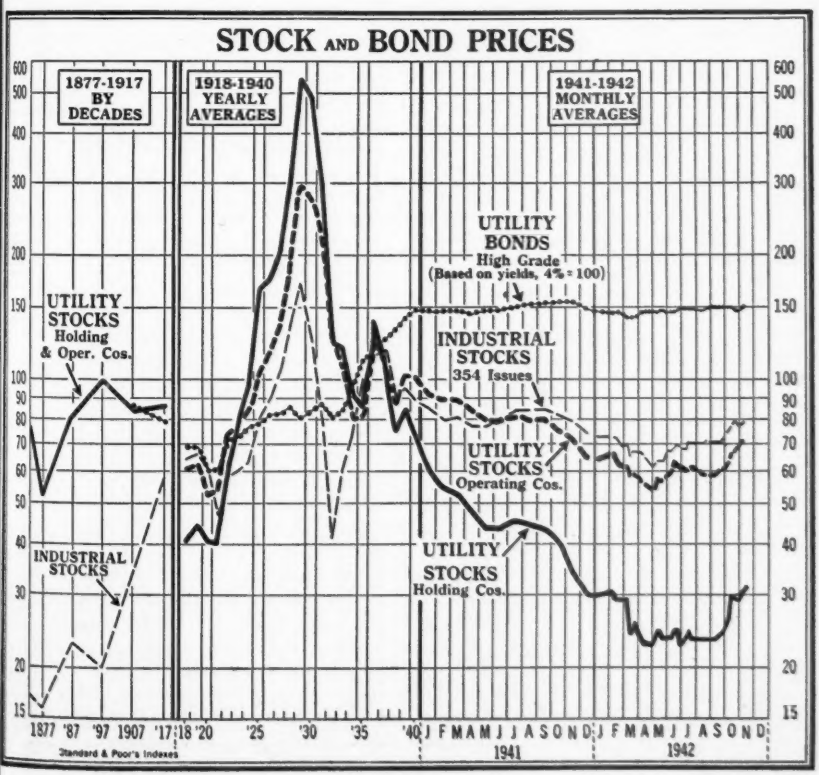
	Theoretical Ratio Based On Plan	*Approximate Price Ratio Nov.10th*
AGECORP 1978 deb.	100%	100%
" 1973 deb.	220	187
AGECO fixed-interest deb.	82-87	93
AGECO income deb. 1983	65-69	53
AGECO income deb. 1986	63-67	53
AGECO deb. ctfs.	34-36	(?)
AGECO conv. oblig.*	17*	5

*In hands of original holders (only).

FOR the twelve months ended September 30th Associated Gas & Electric Corporation and subsidiaries reported consolidated net profits of $8,805,103 (before expenses of the corporation or the trustees), a decrease of about 23 per cent from the corresponding figure last year. It is understood that this report (details of which are not yet available) does not make any substantial change in

the system of tax accruals for 1942, which were on a 40 per cent basis, except for Rochester Gas & Electric at 45 per cent. Adjustment of the Rochester tax would not affect the total results more than one per cent, it is estimated. A more significant factor would be allowance for the surtax exemption on preferred dividends which, it is estimated, might amount to about $700,000 per annum. Crediting the latter figure would bring the total to $9,500,000. This would include one-quarter's results at 1941 tax rates, and hence it is estimated that the calendar year 1942 may work out at around $8,000,000.

If this represented the results of a single operating company, a market valuation of 10-12 times earnings would be feasible, indicating a figure of about $80-96,000,000. However, several Associated Gas properties have already been sold to municipalities and negotiations are currently proceeding for the sale of Staten Island Edison to New York city and the Carolina properties of GenGas to a power authority in that state. Similar sales are doubtless in prospect. On such "tax-free" sales the system can realize generous prices (based on earnings) as compared with current market valuations. On the other hand, AGECORP may lose a substantial part of its earnings equities through subordinations, write-offs, recapitalizations, etc. Until SEC policies are further clarified, it is extremely difficult to make any careful estimate of "break-up value." However, assuming that the tax-free sales might tend to balance the write-offs, etc.,



and that equity might average as high as 10 times earnings or $80,000,000, this would leave an approximate balance for AGECORP and AGECO junior bonds of about $67,000,000 (after deducting about $13,000,000 to take care of trustees' certificates and the AGECORP 8s/40 with accrued interest). Taking AGECORP debentures of 1978 at par value and applying the percentages in the above table to the remaining bonds, the total works out at around $230,000,000. Dividing $67,000,000 by $229,000,000 would indicate a potential value of about 29 for AGECORP 1978 debentures, which currently sell over the counter around 15. Such a valuation would seem dependent on (1) disposal of a substantial part of system properties on a tax-free basis, or (2) more generous SEC treatment with respect to recapitalizations, etc., than heretofore indicated by the Virginia Public Service decision, various findings and opinions, etc.

Portland General Electric and "Pepco"

PORTLAND General Electric has been buying some power from Bonneville, and the latter has been desirous of purchasing the property. Substantially all the company's stock is owned by Portland Electric Power Company (familiarly known as "Pepco") and pledged behind that company's income bonds. The stock is actually held by Kugler & Co. as nominee for the Guaranty Trust Company, bond trustee, the stock having been taken over in March, 1939, when 30 per cent interest arrears had accumulated. The company later filed in bankruptcy under the Chandler Act and independent trustees were appointed, who believed that they should have control of the stock, but Guaranty Trust Company refused to surrender it. The situation is complicated by loans aggregating $5,500,000 which had been made by the Chase National Bank and Harris Trust & Savings Bank to Portland General Electric. While the matter has not yet been finally settled by the court, rulings thus far made seem to favor the Guaranty Trust Company. Meanwhile, however, the independent trustees are negotiating with Bonneville for sale of the subsidiary, apparently in the belief that they can deliver the stock if the deal is consummated.

Thomas W. Delzell, one of the independent trustees, at a recent SEC hearing indicated that the management had asked Bonneville for about $60,000,000, while it is rumored that the best offer by the latter is in the neighborhood of $56,000,000.

Portland General Electric's debt aggregates about $49,500,000, including the bank loans mentioned above, and hence a sale at the above-mentioned figures would leave some cash for Portland Electric Power. The latter has about $16,000,000 bonds outstanding and if a sale could be consummated at a compromise figure around $58,000,000, this would apparently leave about $500 per bond for Pepco (plus remaining assets). These bonds are currently selling over the counter around 31.

HOWEVER, in the Pepco reorganization plan proposed by the trustees it has been suggested that 28 per cent of the assets be distributed to holders of the prior preferred stock, with only 72 per cent going to bondholders. This is on the theory that the company's equity in Portland General Electric may be estimated at $25,800,000 and in Portland Traction Company at $6,700,000, with an additional $1,210,000 interest in some interurban railways, directly operated by Pepco. Under this plan the total value assigned to Portland General Electric would be in excess of $75,000,000 which seems far above any likely sale figure to Bonneville.

Portland General Electric in the twelve months ended June 30th reported net income of $1,534,974, compared with $1,436,204 last year. Assuming that the 1942 calendar year figure might be around $1,500,000 and that this could be capitalized at 10 times, or $15,000,000, this would create a total value around $64,500,000. A price of $58,000,000

would mean a stock valuation at only about 5.6 times earnings. However, the fact that maintenance and depreciation aggregate only about 15 per cent of earnings, somewhat below the best standard, may be a factor. Moreover, Bonneville may take into account the fact that it is selling power to the company at low rates; it is said that a readjustment of such rates might cost the company $3-$400,000 a year. Taking the larger of these two figures, net would thereby be reduced to around $1,100,000 and the earnings multiple (based on a sale price of $58,000,000) would be slightly under 8, which still seems on the low side as compared with sales of other utility properties to power agencies.

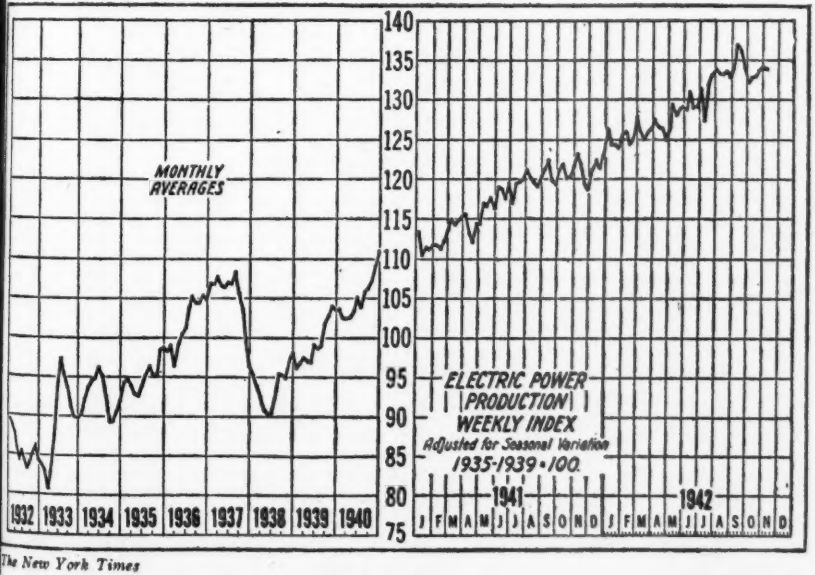
Columbia Oil's Panhandle Sale Finally Approved

LAST July Phillips Petroleum Company and Missouri-Kansas Pipe Line agreed to buy from Columbia Oil & Gasoline its 50.1 per cent equity interest in Panhandle Eastern Pipe Line. On October 2nd the SEC approved the previously issued report of its Utilities Division which, while approving the sale, called for the dissolution of Columbia Oil, with common stockholders receiving $1 a share. However, the commission's findings and opinion were not made public until November 9th.

Constitutionality of Death Sentence Argued in North American Case

THE United States Circuit Court of Appeals has reserved decision on the constitutionality of § 11 of the Holding Company Act, which was challenged by North American Company in its appeal to the circuit court against an SEC order requiring it to divest itself of all related properties other than Union Electric Company of Missouri.

Charles E. Hughes, Jr., counsel for North American, argued that the death sentence involved an infringement of states' rights.



The New York Times

What the State Commissioners Are Thinking About

Excerpts and digests from the opinions expressed in reports and addresses at the annual convention of the National Association of Railroad and Utilities Commissioners in St. Louis, Missouri, from November 10th to November 12th, 1942.

On Use of Reproduction Cost

". . . let me say that there is not much science in the construction of an opinion of a court, by someone not upon the court, for the purpose of determining what the court has intended to announce as the law, by which it will shape its decisions in future cases. There is a great deal of guesswork about it; and there never was more guesswork than in this period in which we are now living.

"It will, however, probably not be long before we shall receive light from the Supreme Court as to whether a commission in a rate case may under any circumstances reject reproduction cost evidence. The Federal Power Commission now, as I understand, uniformly rejects such evidence. It made such rejection in the Panhandle Eastern Pipe Line Company Case, decided on September 23, 1942; and in that case, by an interim order, required a rate reduction of over $5,000,000 per annum. The Panhandle Eastern Company, in that case, has applied for a rehearing. Presumably a rehearing will be denied, and the case will go, through the court of appeals, to the United States Supreme Court. If it shall, we may expect, perhaps before we meet in convention again, an explicit decision on this reproduction cost evidence question.

"Due to the peculiarity of the record in the Natural Gas Pipeline Company Case, an explicit decision was not compelled in that case, and the opinion rendered, in so far as it touches the reproduction cost matter, is rather far from categorical. I have given you my best guess as to what it means. My guess is in accord with the construction apparently placed upon the opinion by Justices Black, Douglas, and Murphy.

"Counsel for the Panhandle Eastern will now undertake to secure from the United States Supreme Court a judgment showing that my guess is wrong, and that even Justices Black, Douglas, and Murphy were guessing as to what the opinion in which they concurred was intended to mean.

"In any event, regulatory commissions, both Federal and state, will watch for the opinion in the Panhandle Eastern Case with very great interest."

—JOHN E. BENTON,
General solicitor, National Association of Railroad and Utilities Commissioners.

On Utility War Taxes

"IT might be thought that an excess profits tax would have little effect on utilities because their rates are regulated, and it can be advanced that if the regulatory agency is

doing a proper job, there would be no excess profits. But the tax, although called an excess profits tax, is a misnomer, for although it will reach true excess profits, it likewise taxes income which is not ordinarily considered to be excessive. This is due in part to the fact that the [1942] excess profits tax is computed before normal and surtaxes. Thus it taxes an income from which all costs have not been deducted and hence will create liability for excess profits taxes even in instances where there are no true excess profits.

"Relief from a part of the tax burden is given utilities in a provision of the [1942 tax] bill, providing that dividends paid on preferred stock are deductible in computing surtax net income. This provision of the act applies *only to utilities*, and is further restricted to only those utilities whose rates for service are established or approved by a regulatory authority. Thus, the act recognizes that in the case of a regulated industry some concession in tax liability is proper."

—R. W. PETERSON,
Chairman, Wisconsin Public Service Commission.

"IT seems clear that during the war the increases in taxes will not be passed on to customers through higher rates. But what about the period immediately following the war? The taxes will be with us for some time. It is estimated by the House Ways and Means Committee that the gross national debt will be $129,000,000,000 by June 30, 1943, and it will undoubtedly increase after that date. The cost of paying principal and interest on this debt, in addition to normal Federal expenditures, means that the high tax burden must continue. Hence, the war taxes cannot be viewed merely as a temporary and nonrecurring cost which will soon be past. Instead, it appears that taxes have reached a new plateau, at which level they may remain for a number of years. For the future, 'normal' taxes must be high taxes.

"In accordance with long-established regulatory practice and legal precedent, normal taxes, even though at high levels, would ordinarily be passed on to customers through rates for service. But practical aspects of the problem make this solution unlikely. Even if regulatory authority is willing to grant rate increases, the business may not stand the additional burden on sales. Under the present statute, for example, if a utility is subject to the 81 per cent excess profits tax, a $1 increase in rates would produce about $.17 increase in net income after considering that other taxes would also take a piece of the dollar. Increasing rates to cover such taxes, and to yield what has been considered normal returns, might well force rates so high as to deter the development of utility business, or even to cause a decline in the use of utility service with consequent diminishing returns."

—R. W. PETERSON,
Chairman, Wisconsin Public Service Commission.

On Federal-state Coöperation

"I FEEL certain that it is the will and the earnest desire of the state commissions to coöperate as fully as may be possible with the ODT. I am also strongly of the opinion that there would be more direct and practical coöperation from the state bodies, and an incentive to obtain local authority which they may require from their governors or respective legislatures in order to fully coöperate, if the ODT would confidently rely upon the several state regulatory bodies for coöperation within their respective jurisdictions. And, incidentally, in passing let me say that coöperation or joint or concurrent control is the goal desired and this cannot be successfully accomplished unless there is public acknowledgement of the functions of state regulatory bodies as well as ODT in this war effort. I feel that in many quarters there is an existing feeling that, under ODT orders as promulgated, the carriers jump to the conclusion that the ODT is the body to be directly dealt with, and that for the duration local regulation must go into its shell. I am certain that this is not the desire of Mr. Eastman or many of his associates, but it is a feeling which state authorities may well have and is existent with the intrastate carriers involved because of the direct issuance of ODT orders *with no reference or instructions* in those orders that they will be carried out in conjunction with the state regulatory bodies, which I am sure all state regulatory bodies desire to do if given the opportunity.

"On the other hand, all of us state regulatory officials must have the courage to make drastic adjustments in our intrastate traffic control in accordance with the policies set forth by the ODT and I am sure that there is no one here who is unwilling to do this. Most of the state regulatory bodies are fully equipped and the personnel of the state commissions is such that, with their intimate knowledge of local conditions, they are in a much better position to acquaint the public with the necessity for readjustments of transportation facilities in each state on a far more equitable basis than by arbitrary adherence to any general rule affecting all sections of the nation.

"It is to be hoped that the ODT will realize that the knowledge possessed by the

state bodies should be utilized and that through them the drastic changes which are ahead of us can be accomplished far more expeditiously and with less disruption to the existing order than by attempting to build a newly created and loosely directed Federal control."

—CARROLL L. MEINS,
Chairman, Massachusetts Department of Public Utilities Commissioners.

On Public Ownership

"THE vast majority of the public has repeatedly demonstrated that it does not view with favor public ownership of utilities. I hold no brief for or against public ownership. I merely comment that if public ownership is desired, it should be brought about directly by vote of the local people rather than indirectly through a tax bill.

"Private ownership of utilities may be one of the casualties, or at least a shell-shocked victim of the war. If this is so, the revenue bill of 1942 may be termed a 'task force' to obtain that objective."

—R. W. PETERSON,
Chairman, Wisconsin Public Service Commission.

On Power-factor Rates

"UTILITY rate schedules should truly reflect the cost of the service to which they apply. They should be as simple and uniform as the pertinent economic facts will permit. Sound rate schedules are essential to sound regulation and the two combined will ensure the stability of the utilities and the protection of the public.

"Probably no element of electric rate schedules departs more widely from these basic objectives than does that known by the obnoxious title 'the power-factor penalty clause.' Few will deny that existing power-factor rates depart widely from the cost criterion; the use of the word 'penalty' in the title is a tacit admission of this fact. Moreover, they are neither simple nor uniform as anyone who has attempted to explain such rates to an aggrieved customer can undoubtedly testify. And finally . . . existing rates have failed to protect the public while fostering an investment which may well be subject to adverse criticism."

—FRANCIS T. MCNAMARA,
Electrical consultant, Connecticut Public Utilities Commission.

On Utility Financing

"INCOME taxes have always operated as somewhat of a deterrent of equity financing of utilities, as interest has been a deductible expense for tax purposes. Under the new [1942] Revenue Act, equity financing will be still more difficult. Interest expense is deductible for normal income and surtax purposes. Only one-half of the interest may be deducted for excess profits tax purposes under the invested capital method. Preferred dividends are deductible in computing surtax net income. The tax advantage of these deductions during this period of high tax rates constitutes an incentive to do additional financing with interest-bearing or fixed dividend obligations. Certainly, from a tax viewpoint, there is no incentive to issue common stock.

"Lowered common stock earnings likewise affect the possibility of equity financing. In many instances common earnings will be reduced substantially below the point heretofore required to attract capital. It may be that investors, confronted with low returns on bonds and preferred stocks, and mindful of some of the advantages of equity holdings in the event of inflation, would be willing to invest in common stock even though returns were low. However this may be, the immediately prospective outlook for common stock financing is not bright.

"The utility industry generally has a rather high ratio of fixed interest and dividend obligations. State commissions and Federal agencies have for some time directed efforts toward improvement of this situation by getting a greater portion of common stock in the security base, either by debt reduction programs or by financing in common, and utilities have coöperated in these aims in many instances."

—R. W. PETERSON,
Chairman, Wisconsin Public Service Commission.

WHAT THE STATE COMMISSIONERS ARE THINKING ABOUT

On the Effect of War Taxes on Utility Regulation

"THERE are two recent decisions of regulatory commissions which bear directly on this problem as related to the existing income tax law. In September of this year the Federal Power Commission handed down its decision in the Panhandle Eastern Case. In this decision the commission orders a reduction of some five million dollars in gas rates, and, in discussing the question of taxes, it holds specifically that, in determining revenue requirements as a basis for the prescription of rates, abnormal taxes should not be passed on to the consumer through *increased rates.* The commission further found that the income tax rates prescribed in the 1940 Revenue Act should be considered as normal and anything in excess thereof should be considered as abnormal. However, in computing the amount available for rate reductions, the commission deducts the 1941 taxes, normal and surtax, at the rate prescribed in the 1941 Revenue Act, which represents an increase in the rate from 31 per cent to 45 per cent, 1940 compared with 1941. Thus the commission, in effect, sanctions the deductions of all Federal income taxes, normal and abnormal, except excess profits taxes, in determining the amount by which rates found to be excessive may be reduced; but states specifically that only normal, or 1940, taxes are to be deducted in determining whether an increase in rates is justified. This may not be a proper construction of what the Federal Power Commission intended but it is the only interpretation possible from the decision itself."

—FRANK B. WARREN,
Assistant general solicitor, National Association of Railroad and Utilities Commissioners.

On Uniformity of Taxation in Regulation of Profits

"AT a glance it would seem incongruous for a regulated public utility to pay excess profits taxes when, in theory at least, the regulatory commission is assumed to fix rates at a level which will produce adequate but not excessive returns. The anomaly is only theoretical, as demonstrated by the fact that Washington Gas Light Company paid excess profits taxes on its 1941 income while the commission found that it earned less than a fair return upon the rate base adopted by the commission.

"There is no question but that a divergence of views exists today with respect to the treatment of income tax in relation to revenue requirements. It is further apparent that the disposition of the matter depends in some degree upon the method pursued in determining the appropriate rate of return in a rate proceeding. It may be worth while observing at this point that a heavy corporate income tax is considered by some economists to be inconsistent with a graduated personal income tax for the reason that the corporation is viewed as merely a tax collection agency or conduit for extracting taxes from the individual investors and, under this assumption, it is inequitable to assess heavy corporate income taxes against individual security owners at a uniform rate when the graduated scale of personal taxes reflects ability to pay. Under the corporate income tax the owner of one share of stock with no taxable personal income pays, through the corporation, at the same rate on the stock dividend portion of his income as the owner of 1,000 shares with a taxable personal income of $100,000."

—FRANK B. WARREN,
Assistant general solicitor, National Association of Railroad and Utilities Commissioners.

On Government Financial Aid

"DIRECT government financing of private utility war-time construction has been relatively less important than in many other industries, but this form of financial aid has been by no means insignificant or unimportant. Thus there have been a number of Reconstruction Finance Corporation loans to utility companies, although more frequently government aid has taken the form of revenue advances. A fairly typical example of the latter was a contract between the War Department and a utility company operating in the state of Mississippi, whereby the War Department paid a connection charge of $136,000, which enabled the utility company to construct an electric transmission line to serve an Army cantonment. The contract provided for an annual refund by the utility company of $13,000 in the form of credits on the power bills rendered for serving the cantonment. In addition, estimated salvage value of $34,000 was to be refunded at the rate of $2,000 a month. The contract specified that the utility company was to furnish electric current as stipulated in the contract at rates no higher than the lowest rates available to any customer under like conditions of service. Sub-

stantially similar contracts have been made by many utility companies with the Defense Plant Corporation with respect to industrial plants which it owns, and with other government agencies. From the utility company's standpoint, this form of contract has the advantage of shifting all or most of the capital risk with respect to the new facilities to the specific customers desiring service. Furthermore, no interest or other capital charge is paid by the utility company for the funds so advanced. Frequently the amount of the monthly repayment is a specified percentage of the gross amount of the power bill until the full amount of the advance is repaid or until the contract is terminated."

—REPORT *of Committee on Corporate Finance, W. C. Fankhauser of California chairman.*

On Depreciation and Taxes

"SINCE the accelerated amortization privilege is relatively new, many of the utility companies are probably delaying a determination of the policy which they will follow in that regard until they know what requirements state and Federal regulatory authorities will make with respect to accounting for accelerated amortization on the companies' books. Some companies may be reluctant to claim accelerated depreciation for tax purposes if they are to be required to record the same amounts on their books. They may feel that the larger book depreciation accruals would later be deducted in determining their rates bases, thereby shifting the monetary advantages of accelerated amortization from the security holders to the customers. They may even have assumed that the Securities and Exchange Commission would require the operating subsidiaries of registered holding companies to take up accelerated amortization on their books if they claim it for tax purposes.

"For many years it was the policy of most utility companies to claim and receive credit for depreciation for tax purposes greatly in excess of their book depreciation accruals. It was also not uncommon for utilities to write off or retire property for tax purposes without retiring such property from their corporate records. As a result, in the case of a large number of companies, there is now a marked discrepancy between book and tax records with respect to both the accumulated depreciation reserves and the amount of depreciable fixed capital. In some cases, the differences are so great that they have materially reduced the invested capital base for excess profits tax purposes, and have made it necessary for the companies concerned to compute their excess profits, if any, on the basis of the average earnings formula. This may be a material disadvantage for some companies, resulting in tax burdens, in relation to the volume of securities outstanding, much greater than they would otherwise have been."

—REPORT *of Committee on Corporate Finance, W. C. Fankhauser of California chairman.*

On Financing War Plant Facilities

". . . With respect to the problem of financing war-time construction, there are indications that these apprehensions do not have the importance which has been attributed to them. On the contrary, it would seem that public utility construction can be financed on a quick, self-liquidating basis either without any or with only temporary increased debt ratios. This is predicated on the following facts:

"(1) Practically the only construction that will be authorized will be that which has a direct relationship to the war effort.

"(2) All such construction is entitled by law to accelerated amortization for tax purposes.

"(3) A large proportion of the companies with big construction programs have taxable excess profits more than sufficient to absorb accelerated amortization of their total war construction expenditures. Therefore, if those companies claim accelerated amortization for tax purposes (and it is inconceivable that they will not), they will be enabled to build up a fund, in five years or less, sufficient to cover 90 per cent (or whatever the excess profits tax rate proves to be) of the cost of new construction. The fund, thus accumulated through the medium of tax savings, can be used and should be used to liquidate short-term serial loans contracted for the purpose of meeting that part of the construction expenditures not covered by funds generated through depreciation accruals and the time lag between tax accruals and tax payments.

"(4) Even in the case of companies which

have no taxable excess profits, the (normal and surtax) tax savings from accelerated amortization will ordinarily suffice to amortize whatever loans may be needed to pay for new construction expenditures, after allowing for the fact that a substantial part of the needed funds will be produced through depreciation accruals."

—REPORT *of Committee on Corporate Finance, W. C. Fankhauser of California, chairman.*

"THERE was some concern late in 1941 as to the means that would be utilized to finance the war-time expansion program of the industry. At that time there were many who believed that the volume of war-time utility construction would necessarily exceed utility construction for the years immediately preceding the war. It now appears, however, that the scarcity of materials and the limitation of productive facilities will materially curtail construction that would otherwise have been made. This condition was reflected in action taken by the War Production Board in August, 1942, when it announced a readjustment of the electric power expansion program for 1943 and 1944 based on a comprehensive review of the power supply and requirements situation in light of the over-all war production program. The net effect of the action taken was to withdraw priorities and stop production on private and municipal generating projects totaling 2,200,000 kilowatts, which had previously been scheduled for operation in 1943 and 1944. In addition, Federal generating projects totaling 1,890,000 kilowatts, scheduled for operation in 1943, 1944, and 1945, were reduced to low ratings under which work will be permitted to continue 'only to the extent that it does not compete for critical materials and equipment needed for direct war uses.' However, the amount of generating capacity now definitely scheduled for the years 1942 through 1944 for the private utility industry is greater than the capacity that was installed in the three preceding years.

"Figures indicating the effect of the curtailment program upon capital expenditures for substations, transmission lines, and distribution facilities are not available. Present circumstances indicate that it may be that the scarcity of copper and other critical materials will greatly curtail the expenditures for these facilities in 1943 and 1944. It is also too early to estimate the extent to which it will be necessary to defer maintenance. For the first six months of 1942, it appears that most utilities had sufficient materials on hand to proceed with their normal maintenance programs, since expenses for maintenance are running somewhat higher in 1942 than in comparable periods last year.

"There is reason to believe, however, that the scarcity of both labor and materials will necessitate the deferring of considerable maintenance in 1943 and 1944.

"If the expansion program for the war years were apportioned evenly throughout the electric utility industry, the problem of estimating the probable source of funds for such capital expenditures would be relatively easy. But new construction will not be evenly spread. Some companies will spend very little for new facilities in the war period; others will spend as much or more than in peace time. It follows, therefore, that a discussion of the financial problems of the utility industry during the war years must distinguish between these two quite different situations. Thus it may well be that the managements of some companies will be primarily concerned, not with the problem of raising new funds for capital expenditures, but rather with the problem of the proper disposition of cash accumulated from depreciation accruals and amortization charges for which there is no outlet in new construction."

—REPORT *of Committee on Corporate Finance, W. C. Fankhauser of California, chairman.*

On Depreciation

"DEPRECIATION accruals give rise to an important source of funds that are available for financing property additions or for retiring securities. Variations in the size of a utility company's depreciation accruals and reserve may have a material effect on the amount of its securities which might otherwise be outstanding. Indeed the fact that a much smaller proportion of new construction has been financed in the last few years from new security issues than was formerly the case is the result to a substantial extent of the material increase in annual depreciation accruals. Before the adoption of the new systems of accounts for electric and gas utilities in 1936, requiring depreciation accounting, most utility companies charged for depreciation (or retirements) amounts sufficient to provide for but little more than current property retirements. This practice not only failed to account for the depreciation currently accruing on property remaining in service (and to that extent tended to overstate net income available for interest and dividends), but, as stated above, it had an important effect upon the volume of securities that were required to finance new construction.

"Since 1937, however, a majority of electric utility companies have gone over to depreciation accounting with the result that in the

period 1939-1941, receipts appropriated through depreciation accruals financed more than 50 per cent of the private electric utility industry's gross capital expenditures."

—REPORT *of Committee on Corporate Finance, W. C. Fankhauser of California, chairman.*

"No subject has aroused more contention and wider divergence of rates and rate applications than that of depreciation. Hearings before state and Federal commissions have featured testimony that has been of such contradictory and befuddling character that commissions and courts have been unable to disentangle the contradictions and have been unable to arrive at any clear policy as to a uniform method of depreciation, or to make any consistent application of any formula.

"The problem of depreciation of utility properties has been before the courts since 1909, when the case of the City of Knoxville v. Knoxville Water Company, 212 US 1, January 4, 1909, made its appearance.

"Since that time, a third of a century ago, conflicting decisions by Federal and state commissions and by courts of law have appeared with the result that rates have been and are being made upon testimony based upon the judgment of so-called expert witnesses rather than upon impersonal mathematical computations which would be applicable generally."

—REPORT *of Committee on Rates of Public Utilities, Richard J. Beamish of Pennsylvania, chairman.*

On Debt Refunding

"ANOTHER significant development of the past decade was the industry-wide debt refunding program which began to assume large proportions in 1935 and continued through 1941. In that 7-year period electric and gas utility companies issued securities in the aggregate amount of nearly seven billion dollars, the greater part of which was first mortgage bonds for refunding purposes. Most of the refunding bond issues were sold for the purpose of taking advantage of lower interest rates and later maturity dates. Interest savings have been substantial and this has been reflected in the improvement in the ratio of earnings to fixed charges. In addition, indentures in many instances have been modernized, potential conflicts of interest affecting indenture trustees have been eliminated, and similar improvements made in the various economic and protective covenants."

—REPORT *of Committee on Corporate Finance, W. C. Fankhauser of California, chairman.*

On Financing through Tax Accruals

"A TEMPORARY source of current funds for new construction which has become of increasing importance, especially since 1940, is the annual increase in Federal tax accruals by utility companies. Taxes accrued in 1940 were not paid until 1941 and those accrued in 1941 are being paid in 1942. At the same time the 1941 taxes of the private electric utility industry were approximately $104,000,000 higher than they were in 1940 and it is has been estimated that 1942 tax accruals will exceed 1941 taxes by more than $125,000,000. The time lag between the accrual and the payment of taxes provides temporary interest-free funds for new construction equivalent to the difference between current accruals and actual payments. Obviously, this source will 'peter out' when current tax accruals are no longer greater in amount than current tax payments. And if the process is ever reversed and Federal tax accruals are less than the then current tax payments, there will be a drain on current funds instead of an addition thereto. Needless to say, the relation between tax accruals and net income tends to produce a compensating effect which offsets the factors just outlined, on both the upward and downward movement of tax accruals."

—REPORT *of Committee on Corporate Finance, W. C. Fankhauser of California, chairman.*

On Disposition of Excess Accumulations of Cash

"IT was stated earlier that many of those utilities that must curtail their construction programs during the war period will face the problem of the proper disposition of

excess cash accumulated from depreciation accruals, amortization charges, tax accruals, and similar sources. It may be necessary for regulatory commissions to examine closely the policies of different utilities in this regard. The presence of large accumulations of cash may create a temptation to divert it to holding companies or other security holders in the form of dividends, lower depreciation charges, or the repayment of open account advances or debt owed to the holding companies, some of which may involve issues of subordination on the basis of the Supreme Court's decision in the 'Deep Rock' and other cases.

"There can be no hard and fast formula for determining the proper use of excess cash funds to the best advantage of all companies. Each company presents its own particular complexity of factors, including the proportion of senior securities in its capital structure, its estimated capital requirements after the war, its past and present dividend policy, and so forth.

"An immediate obvious use for such cash is the reduction of debt. Although this may have its disadvantages from a tax standpoint, it should be required of those utilities which have a clearly excessive amount of funded debt. In other cases where the debt ratio is above 50 per cent of net property, idle cash should also be used for debt reduction unless there are strong reasons to the contrary."

—REPORT *of Committee on Corporate Finance, W. C. Fankhauser of California, chairman.*

On Tax Amortization of War Plants

"AN analysis of the economic significance of the amortization provisions of § 124 [of the Revenue Act] is of the utmost importance in our appraisal of the problem of financing new war-time construction. In the case of a utility company which has taxable net income from properties other than emergency facilities, which is the typical situation of utility companies, accelerated amortization will permit it to recoup a substantial part of the construction cost of the new facilities through tax savings over a 5-year period, even if the revenue received from the operations of such new facilities does not fully cover such rapid depreciation. Thus the tax savings resulting from rapid amortization will in effect pay for a substantial part, ranging from 45 per cent to 90 per cent of the cost of such facilities over a 5-year period, depending upon the tax rates finally enacted. It is important to bear in mind that these tax savings, which will enable the taxpayer to retain earnings equivalent to such a large part of the cost of emergency facilities, will materialize regardless of the earnings produced by such facilities, so long as the taxpayer has a net income from all its business at least as large as the amount of amortization to be deducted.

"Since presumably no utility project will be authorized during the war period unless it has a clear relationship to the war program, it follows that the bulk of all capital expenditures in this period, with respect to which necessity certificates are sought, will in fact be entitled to accelerated amortization privileges for tax purposes. That, in fact, has been the experience to date. As yet, it is too early to determine the extent to which utility companies will actually deduct accelerated amortization in their tax returns. It would appear, however, that all companies which are in the excess profits tax bracket will have such an advantage in taking accelerated amortization that it is safe to assume that they will avail themselves of the privileges. It is admitted that there is somewhat less certainty concerning the extent to which those companies which are not in the excess profits tax bracket will take accelerated amortization. This follows from the fact that while they gain the advantage of an immediate tax saving computed on the basis of the normal and surtax rates, they must take into consideration the fact that when the property concerned is fully amortized for tax purposes, no further depreciation deductions may be made during its remaining service life. If it is anticipated that post-war normal and surtax rates will be no higher than during the war, the companies may conclude that there is a compound interest advantage in taking the tax savings immediately rather than waiting for them to accrue over a period of twenty-five or thirty years."

—REPORT *of Committee on Corporate Finance, W. C. Fankhauser of California, chairman.*

On Federal Trust Legislation

"IT is the hope of our committee that the attempt to secure the enactment of Federal legislation designed for the destruction of state powers, under the guise of necessary war legislation, has been permanently defeated.

"The citizens of the states are the citizens of the nation, and they have no will that the nation shall be impeded in the war effort

through a refusal of the states to permit the use of their highways for transportation actually necessary to the successful prosecution of the war. The agreement reported by the Secretary of Commerce proves that fact. If, however, any state shall fail to conform to the spirit of that agreement, so that it becomes necessary to use the dominant power of the Federal government to open the highways of any state, then the war power of the government should be exercised in that state alone. There should be no general destruction of state power by the enactment of a Federal statute of general application."

—REPORT *of Committee on Legislation, H. Lester Hooker of Virginia, chairman.*

On Tentative Principles of Progressive Rate Making

"1. COMMISSIONS should exclude all speculative evidence bearing upon reproduction cost or going-concern value in rate cases, since the Constitution of the United States does not require commissions to consider such evidence.

"2. Commissions should give careful consideration to the question as to whether recent Supreme Court decisions warrant fixing rates wholly without relation to any formula of 'fair value.'

"3. Commissions should explore the possibility of fixing reasonable rates on the basis of the cost of the service rendered, in so far as it bears a relation to the value of the service rendered.

"4. Commissions should attempt to perfect and establish methods for ascertaining original cost or prudent investment in utility plant, and if they determine that a rate base is essential, should use as such rate base original cost or prudent investment less the depreciation reserve requirement or book reserve, whichever is the higher.

"5. Commissions should order public service companies to keep their books on an original cost basis together with a continuing inventory of plant.

"6. Commissions should adopt quick and reasonably accurate methods of calculating annual and accrued depreciation, and should explore the feasibility of determining the minimum and maximum depreciation reserve requirements upon a percentage of depreciable plant, within which the utility should be required to maintain the depreciation reserve, regulating the annual charge by the necessity of keeping above the minimum and below the maximum on the basis of the year's credits to the reserve.

"7. Commissions should make studies designed to test the extent to which a reduction in the cost of utility services will contribute to increased consumer use, and the economic feasibility of establishing utility rates for the purpose of increasing mass consumption sufficient to absorb all of the services that can be produced by the facilities in existence.

"8. Commissions should closely analyze and observe contributions to plant made by the government during the period of war, in order that such plant and the costs relative thereto should not be used to inflate utility rates.

"9. Commissions should consider special rates above normal rates and applicable solely to war industries, and should develop a means of utilizing such rates for an increased annual depreciation charge, thereby building up a depreciation reserve with a consequent tendency towards lower rates following the war.

"10. Where they have statutory authority to do so, commissions should set up uniform accounts for the purpose of recapturing excess earnings during the war period and applying such reserves to amortization of plant accounts or restoration of depreciation or other contingent funds or reserves.

"11. During the war period utility companies should be required by the commissions to take advantage of the accelerated amortization privileges accorded through the Federal Internal Revenue acts, and to use the tax savings therefrom to amortize indebtedness arising out of new construction.

"12. On principles set out in the report of this committee in 1941, commissions should explore more thoroughly the possible uses and real value of comparative studies of utility costs and rates in order to test the soundness of utility rate structures."

—REPORT *of Committee on Progress in Public Utility Regulation (presented subject to modification), Leon Jourolmon, Jr., of Tennessee, chairman.*

On Uniform Service Company Contract

"IN reply to the inquiry addressed by us to the various state commissions, the following quotation is taken from letter written by John Siggins, Jr., chairman of the Pennsylvania Public Utility Commission:

"'At the present time, we in Pennsylvania are vitally interested in the effect of the war, and particularly in war-time taxes on utility rates; in seeing that the cost of new capacity installed for the use of industrials is not

saddled on the domestic consumer when the war ends; in the proper maintenance in the face of scarce materials and personnel losses; in rearrangement of the motor carrier set-up to conserve rubber.'

This statement aptly expresses the pressing problems which are now before all state regulatory commissions.

"It is our opinion that this special committee should be discontinued at least for the duration of the present war emergency. We believe that continued study of service companies, their practices, their accounting methods, etc., is highly desirable. We recommend that the continuation of such study be made by one of our standing committees. The standing Committee on Regulatory Procedure might be appropriate.

"We feel that the matter of a uniform service contract is secondary to the other matters now confronting the various regulatory commissions."

—REPORT *of Special Committee on Uniform Service Company Contract, A. B. Hill of Arkansas, chairman.*

On Federal-state Telephone Regulation

"THE Federal [Communications] Commission has jurisdiction over a relatively small part of telephone service, but, under existing conditions, regulation of this relatively small part of the business has an important bearing on regulation of the balance of the telephone business in the United States. To illustrate, adjustments in interstate telephone rates have been based largely upon the operations of the Long Lines Department of the American Telephone and Telegraph Company as recorded in that company's books. These records reflect in a large measure revenues collected from telephone subscribers by the associated companies and delivered to Long Lines, less a commission paid to the local companies for service performed in collecting and billing for the interstate messages.

"On the basis of these *pro forma* results reductions in interstate rates have been made which have the effect of reducing the amounts paid to the associated companies without in any way reducing the cost of the services supplied by the associated companies. This situation was recognized by the Federal commission in approving the last reduction in interstate rates which became effective July 1, 1941. In approving this reduction the Federal commission held that no part of the reduction should come from the associated or connecting companies, the inference being that commission payments to these companies should be adjusted so that the reduction in interstate rates would not affect the compensation to the connecting companies.

"Many states feel that regulation of telephone business within their states should be treated as a unit and appropriate determination made of respective toll and exchange rates on the basis of operations within the state. This is difficult of accomplishment at the present time due to the fact that the associated companies usually supply both interstate and intrastate service using toll facilities within their territory only, a portion of the interstate toll service being supplied by the Long Lines Department. This creates a situation where the state commission is faced with the problem of condoning what might be considered an unjust discrimination due to the difference in level of intrastate and interstate toll rates or proceeding to lower the intrastate toll rates to the level of the interstate toll rates. Such action has been taken in Michigan, Pennsylvania, and Utah, in formal cases instituted by these commissions.

"The reduction in intrastate toll rates has the effect of minimizing the possibility of adjusting exchange rates since the revenues from operations are limited and reductions in one class of rates necessarily affect the ability to make adjustments elsewhere."

—REPORT *of Committee Coöperating with the Federal Communications Commission in Special Studies of Telephone Regulatory Problems.*

On Telephone Toll Separation Studies

"THERE has been a good deal of confusion with respect to the board-to-board and station-to-station basis of stating rates. The Communications Act provides, in effect, that toll service is service not included within the contract for exchange service and for which a separate charge is made. This is rather a loose definition, but, accepting it for the moment, in only 10 states does the definition of exchange service definitely include connection to the toll board or toll facilities. In the remainder of the states it is at least an open question whether, under the exchange tariffs filed, it is intended that the payment made by the subscriber for exchange service shall cover access to the toll board.

"Further, whether or not rates shall be stated on a basis which includes access to the toll board within the compensation charged for exchange service is a question which is separable from the basis upon which cost determinations shall be made. For instance, if a state commission shall determine the revenue requirements necessary in connection with the operations of a certain exchange or group of exchanges on a basis which includes only the costs associated with exchange service as distinguished from those incurred in connecting the subscribers to the toll board, there would seem to be no insurmountable obstacle to the statement of resulting exchange rates on what is called a board-to-board basis. In other words, exchange rates as applied to the customers could properly, on a flat rate basis, include the privilege of access of the toll board, but the cost analysis underlying the prescription of the rate itself could very properly have been made on a basis which allocated to toll use an appropriate portion of the costs incurred within the exchange area.

"The telephone companies would have no grounds for complaint if the procedure adopted by state and Federal agencies as a basis for cost allocation is uniform so that none of the property and expenses actually incurred is omitted, and the public as a whole has no grounds for complaint if they are not required to pay a return upon the same property twice. The coöperative effort now under way should be continued since it holds great possibilities for further simplification of rate making in the telephone field; and the telephone business is peculiarly one where coöperation is essential. State commissions have jurisdiction over the bulk of the telephone revenues, but the Federal commission is an essential element in the regulation of the industry as a whole and uniformity in the treatment of certain problems is imperative."

—REPORT *of Committee Coöperating with the Federal Communications Commission in Special Studies of Telephone Regulatory Problems.*

On Valuation

"ADVOCATES of the acceptance of original cost, or prudent investment, as the rate-fixing base in utility rate cases, and the elimination of the old fair value rule, feel that they have made definite advance—that commissions are free now to adopt original cost or prudent investment as the rate base. There are those who join with the questioning justices in asking whether the [Supreme] Court has really laid to rest the 'ghost of Smyth *v.* Ames' or has gone any further than to hold that regulatory bodies are not under the requirement of recognizing—unless under statutory direction—cost of reproduction new as an element of value in ascertaining 'fair value.' In short, has the majority receded from the old fair value rule *per se?* It is pointed out that the majority did not declare for original cost or prudent investment.

"The decision [Natural Gas Pipeline Co. *v.* Federal Power Commission (1942) 42 PUR (NS) 129] seems to reveal disagreement on whether the court could properly invalidate the order of the Federal Power Commission, or an order of any regulatory body fixing rates, on the ground that 'the limits of due process have been overstepped.' Concurring justices argued that rate making is a species of price fixing and 'legislative price fixing is not prohibited by the due process clause.' They fear that the references by the majority to constitutional requirements and limits of due process might be interpreted as calling for a continuance of the fair value theory. It may take further decisions of the court to dissipate the fog, and it is too early to predict to what extent the decision marks 'the start of a new chapter in the regulation of utility rates.'

"There is, however, reason to believe that the Supreme Court is withdrawing as far as it can from interference with regulatory matters and controversies having, however, dropped a precautionary and protective anchor to leeward in the form of an admonition to regulatory bodies not to overstep the limits of due process. If this admonition is observed, it would seem that the commissions are free of interference by the Supreme Court. It may be expected that cases designed to penetrate further the mind of the justices will reach the courts."

—REPORT *of Committee on Valuation, Ernest I. Lewis, director, Bureau of Valuation, Interstate Commerce Commission, chairman.*

On Rural Electrification

"FOR post-war rural electrification new-design ideas need to be developed. Engineering designs have been perfected for transformers of new design with low core losses. There may be a change to the natural rather than the upside-down construction, using the

ground wire on top; reduction of the cost of underground lines through the development of new kinds of cable, without any increase in annual charges; generating equipment based on new conceptions of economy, and developing hydroelectric power on many small streams which would not be regarded as economical to private utilities; small circuit breakers in the primary of every small rural transformer, at a cost of little more than a primary fuse; automatic reclosing breakers in the secondary of small rural transformers, at a cost of only about a dollar each; better arresters, of more economical design; outage recorders to locate instantly breaker outages; and carrier telephone service over the coöperative's own power line."

—REPORT *of Committee on Progress in Public Utility Regulation (presented subject to modification), Leon Jourolmon, Jr., chairman.*

On the ODT

"THIS plan [of utilizing state commissions] has never been worked out, and while your committee has waited at the crossroads of hopeful expectancy for the green light, it has witnessed the mushroom growth of the Office of Defense Transportation to a staff personnel four times that necessary to administer the Selective Draft, and to a number which doubtless exceeds the total personnel of all the state commissions of the 48 states combined.

"Your committee from the very beginning undertook to urge upon Mr. Eastman and his staff the inadvisability of recruiting an inexperienced staff for the administration and enforcement of the orders of his office which would mean a duplication of the existing staff and personnel of the various district motor carrier bureaus and the several state commissions. In taking that position, we were prompted solely by the desire to have a greater share in the preservation and utilization of our transportation system in the furtherance of our war effort in the present national emergency.

"We were convinced that the existing trained personnel could efficiently handle the job, and after months of the uncertain effort of this newly created and duplicating staff, we are more convinced than ever of the correctness of our position. We have seen orders issued, postponed, and finally withdrawn with the total net result of a great deal of waste in time and money and unnecessary disturbance of the transportation industry as well as the general public. A fair and honest survey of the work of this agency fails to reveal any substantial good that has been accomplished. Such benefit as might flow from certain of the orders has not been realized by reason of the inability of the ODT to enforce even those provisions such as the circuity and overloading provisions of the motor carrier orders.

"Time precludes the prolixity necessary for the detailing of our numerous conferences which have occurred almost monthly and the great volume of correspondence, but the committee was most hopeful until only recently that this latter plan could be put into operation with ODT and subsequently extended to other agencies."

—REPORT *of Special War Committee, Walter R. McDonald of Georgia, chairman.*

On Emergency Transportation

"THE importance of the rail carriers has been and is being emphasized during the present period of national emergency. It has been said that no other group in America has performed its functions with any greater efficiency and thoroughness in this emergency than have the railroads.

"The large number of troops moved and materials transported for the government, in addition to increased demands to meet the needs of the general public, accentuated by the shortage of rubber and gasoline and the diversion of ships for government use, has extended railroad operation to a new high. The peak in rail transportation, up to the present time, was reached in the year 1929. The railroads performed more service in 1941 than any year in their history. They moved 475,000,000,000 ton miles. The tons of freight originated in 1941 were 1,209,584,892. This amount of freight originating has been exceeded in several previous years. However, the tons of 1941 traffic traveled more miles than any previous year. In other words, there was more rail transportation service, as measured by tons multiplied by distance, in 1941 than in any prior year. Recent figures show that for the first six months of 1942 the railroads handled approximately 30 per cent more traffic than they handled in the same period of 1929.

"The motor carriers, likewise, are performing a great service."

—REPORT *of Committee on Services and Facilities of Transportation Agencies, Jerry W. Carter of Florida, chairman.*

The March of Events

NARUC Convention

With a registered attendance in excess of three hundred, the National Association of Railroad and Utilities Commissioners held its fifty-fourth annual convention at the Coronado hotel in St. Louis, Missouri, November 10th to 12th. On the roll call 38 state commissions and 4 Federal commissions responded.

It was a "war convention" and the discussions and reports of the three days dealt almost entirely with the relationship of utility regulation to the war emergency. The convention was called to order by the president of the association, Frank W. Matson, chairman of the Minnesota Railroad and Warehouse Commission. The meeting was welcomed to St. Louis by the chairman of the Missouri Public Service Commission, Frederick Stueck, and the mayor of St. Louis, William Dee Becker. Response on behalf of the association was made by Wade O. Martin, first vice president of the association and chairman of the Louisiana commission.

In his brief opening address, President Matson reviewed the events of the current year. He had been president of the association only since July, when the former president, Commissioner James of Missouri, resigned to go on active duty as a lieutenant commander in the Navy. Subsequently the executive committee of the association decided to shift the convention from Dallas, Texas, to St. Louis, and to restrict the scope of the meeting. President Matson recalled the activities of the association in coöperating with the ICC and especially mentioned the work of the Special War Committee and the assistant solicitor general, Frank B. Warren, who took his post during the past year.

John E. Benton, general solicitor of the association, in his address concerning the activities of the Washington office, recalled the efforts of the association in opposing the so-called "big truck bill" upon which Congress failed to act. Mr. Benton also referred to certain regulatory litigation in which the association entered appearance. He analyzed in some detail the Natural Gas Pipeline decision in which he observed the Supreme Court had not overruled Smyth *v.* Ames and had refused to adopt any rigid formula for rate making. He concluded that the Natural Gas Pipeline decision simply gave the state commissions more latitude in determining the rate base in individual situations.

On the second day the association received the report of the Special War Committee under Chairman Walter R. McDonald, who is also chairman of the Georgia Public Service Commission. The scheduled topic for discussion was war-time transportation problems. Joseph B. Eastman, director of ODT, who was one of the scheduled discussion leaders, was delayed by train connections and appeared later for a brief address in which he emphasized the serious impact of the rubber shortage on the important job which motor transport must do in the emergency.

Chairman Carroll L. Meins of the Massachusetts Department of Public Utilities also participated in the discussion of transportation problems and raised the question of whether the ODT was availing itself of the opportunity which had been offered to it for securing the active coöperation of the state regulatory commissions and their staff personnel.

Also received at this session were the reports of the committees on Legislation (chairman, H. Lester Hooker of Virginia), Progress in the Regulation of Transportation Agencies (chairman, George C. McConnaughey of Ohio), Rates of Transportation Agencies (chairman, Ben C. Larkin of North Dakota), Service and Facilities of Transportation Agencies (chairman, Jerry W. Carter of Florida), Safety of Operation of Transportation Agencies (chairman, C. L. Doherty of South Dakota).

On the afternoon of November 11th, the association received the report of the Committee on Coöperation under the chairmanship of John J. Murphy of South Dakota. The topic for discussion at this session was the relation between state regulatory agencies and Federal war agencies. The leaders of the discussion were Herbert S. Marks, acting chief of the WPB Power Division, Director Robert A. Nixon of the OPA Transportation and Public Utilities Division, and Justus F. Craemer, president of the California Railroad Commission.

President Craemer reviewed the activities of the California commission in coöperating with the armed forces on emergency matters affecting utilities. He made it clear that the state commission had rendered valuable assistance in this connection by taking the initiative in planning and organization work.

Mr. Marks discussed the activities of the WPB Power Division in dealing with control

of gas and electric supply in various areas. Mr. Nixon's address was substantially reported in full text in PUBLIC UTILITIES FORTNIGHTLY of November 19th.

Also at this session were received reports of the Committee on Coöperating with the Federal Communications Commission in Special Telephone Studies, the Committee on Depreciation (chairman, Nelson Lee Smith of Washington, D. C.), and the Committee on Rates of Public Utilities (chairman, Richard J. Beamish of Pennsylvania).

The feature of the morning session of the third day, November 12th, was the action taken on a resolution which had been proposed by the Committee on Rates of Public Utilities under the leadership of Chairman Beamish. This proposal to have a series of joint hearings on the subject of depreciation by Mr. Beamish's committee, as well as the association's Committee on Depreciation and certain Federal commissions, was rejected by the executive body. Mr. Beamish made some objection from the floor but the committee's action was not disturbed.

The scheduled discussion for the session was the effect of war taxes on utility regulation. Chairman Peterson of the Wisconsin Public Service Commission asserted that one effect of high war taxes is the "stimulus which they will give to public ownership of utilities." Private ownership of utilities, he commented, may be one of the casualties, or at least a "shell-shocked" victim of the war. If this is so, he added, "the revenue bill of 1942 may be termed a 'task force' to obtain that objective."

Frank B. Warren, the association's assistant general solicitor, also discussed the question with emphasis on recent regulatory questions as to whether abnormal war taxes should be charged against operating expenses, and also what might properly be considered abnormal war taxes.

Commissioner Robert E. Healy of the Securities and Exchange Commission submitted at this session a table prepared by an SEC staff member showing the effect of war taxes on utility financing. This was presented in connection with a report of the Committee on Corporate Finance under the chairmanship of W. C. Fankhauser of California. Other committees reporting at this session were Valuation (chairman, Ernest I. Lewis of the ICC), Uniform Service Company Contract (chairman, A. B. Hill of Arkansas), Progress in the Regulation of Public Utilities (chairman, Leon Jourolmon, Jr., of Tennessee), Developments in Regulatory Law (chairman, Harold E. Davidson of Iowa), Air Transportation Costs (chairman, W. A. Weeks of Missouri).

At the afternoon session of the third day uniform power-factor clauses in electric rate schedules and fuel adjustment clauses were discussed by Professor Francis T. McNamara of Yale University, who is a consultant to the Connecticut Public Utilities Commission.

The report of the Committee on Accounts and Statistics was made by its chairman, Fred Kleinman of Illinois.

The following officers were reëlected: President Frank W. Matson of St. Paul; Wade O. Martin of New Orleans, first vice president; John E. Benton of Washington, D. C., general solicitor; Frank B. Warren of Washington, D. C., assistant general solicitor; Ben Smart of Washington, D. C., secretary. George C. McConnaughey of Columbus, Ohio, was elected second vice president.

Chicago was designated as the place of the 1943 convention, and September 14th as the date.

WPB Reorganization

ALL operating public utility industries have been grouped together in the same bureau in the latest War Production Board reorganization. The name of the bureau is the Construction and Utilities Bureau, under the direction of John Hall. It is one of the five bureaus into which all industry branches have been classified after being first raised to the rank of division. (The other four industry bureaus are Minerals, Commodities, Consumer Goods, and Equipment.)

The distinction between the old "power branch" and "communications branch" is preserved in the new division status. Although both are now under a common bureau director, the new power division will still include jurisdiction over electric, gas, and waterworks. The division of communications equipment (formerly "communications branch") will cover telephone and telegraph companies. Other industry divisions which also go under the new Construction and Utilities Bureau are plumbing and heating, building materials, lumber and lumber products, transportation equipment, and governmental (formerly Bureau of Government Requirements).

For the immediate present it is not expected that the new reorganization will mean any important changes either of personnel or policy within the two WPB utility divisions. Leighton H. Peebles continues as chief of communications equipment and Herbert S. Marks continues as acting chief of the power division. Eventually, however, the unifying and "tightening up" program of Ferdinand Eberstadt is likely to result in further consolidation of functions within the five industrial bureaus. The purpose would be to eliminate lost motion, overlapping, and generally taking up certain "slack lines" of organization which have been the subject of some criticism in the past. Hence, we may eventually witness the importance of the various bureaus emphasized as distinguished from their respective component industrial divisions.

All of the new industrial bureaus will report to Ernest Kanzler, director general of operations. He in turn will be responsible to Mr. Eberstadt, who is responsible only to

Donald Nelson, WPB chairman. Unofficially, Eberstadt, whose ostensibly modest title is WPB program vice chairman, is really running the WPB show. Even Donald Nelson has apparently retired to a position of more or less formal supervision. That may only be temporary—to give Eberstadt a chance to show what he can do. In other words, virtually all of WPB now heads up under Eberstadt, except comparatively small staffs attached to the offices of WPB Vice Chairman Charles E. Wilson, Rubber Czar William M. Jeffers, and Nelson's own office, including William L. Batt and J. S. Knowlson.

The three "controlled materials" division (copper, steel, and aluminum) will report to Eberstadt as will J. A. Krug, head of the new "distribution bureau," which will exercise the functions of the old priorities division. Each industry division will be assigned a special labor representative and a "division requirements committee." The latter will be composed of representatives of the seven "claimant agencies" which ultimately divide up available materials according to the allotments made by the Eberstadt program committee. These agencies are Army, Navy, Maritime, Aircraft, Board of Economic Warfare, Lend-lease, and civilian supply.

WPB Authorizes Top Priority For Utilities

POINTING up the importance of keeping the nation's civilian economy in a healthy condition, the requirements committee of the War Production Board on November 11th authorized that the top priority rating of AA-1 may be applied to essential repair and maintenance.

Included in the scope of the determination, which becomes a basic policy for the first quarter of 1943, are essential repairs and maintenance for productive facilities, utilities, housing, and consumers' durable goods.

The action will make it possible for vital plants and factories, mines and refineries, and other industrial facilities to continue effective production of both munitions of war and essential civilian goods. Communication and transportation systems, gas, oil, and water lines and other services will be assured of materials to keep them performing their essential functions. Supplies and materials needed for essential maintenance and repair for housing also may be obtained.

Until the Controlled Materials Plan goes into full operation, the existing priorities system will be used to obtain the steel, copper, and aluminum needed for such maintenance and repair. Under CMP each agency will break down its material requirements three ways: into that needed for production, construction and facilities, and maintenance and repair.

By including maintenance and repair requirements in the over-all materials program, CMP provides a long-range assurance that the nation's essential industries will be kept in operation.

Urges Post-war Railroad Mergers

PRESIDENT Roosevelt recently sent to Congress a report suggesting post-war consolidation of the nation's railroads into a limited number of regional systems. The report was prepared by an advisory committee of the National Resources Planning Board. Owen D. Young, chairman of General Electric Company, headed the committee. The President sent the report to Congress for its consideration.

In transmitting the report to Congress President Roosevelt emphasized the major rôle transportation is playing in winning the war and said that it will play a similar part in winning the peace. He said that prior to the enactment of the Transportation Act of 1940 he requested the board in coöperation with Federal transportation agencies to make a study of transportation development problems with particular reference to the government's aims and policies.

In this respect he declared that government expenditures for transportation facilities of all types have amounted to about $1,000,000,000 annually and similar expenditures by states and municipalities have exceeded this figure.

Asked to Dispense with Outdoor Lighting

THE War Production Board last month asked city officials, civic clubs, chambers of commerce, merchants, and citizens generally to dispense with outdoor decorative lighting this Christmas.

WPB pointed out that Christmas lighting requires the use of critical materials, electricity, and man power and is not in line with general conservation programs already under way.

The attitude of WPB toward Christmas lighting was announced because of numerous inquiries that have already been received from city officials, chambers of commerce, and civic clubs asking what they should do this Christmas in regard to outdoor decorative lighting.

WPB did not ask that indoor Christmas lighting, whether in the home or in stores, be eliminated, but it believes that outdoor lighting, such as festooned store fronts and decorated streets, must be dispensed with in war time.

Although the electricity saving and the resultant fuel saving may appear small, as compared with the total annual usage, nevertheless the elimination of outdoor Christmas lighting was estimated to save 50,000,000 kilowatt hours of electricity, enough to meet the lighting and power requirements of a city of 50,000 for a year.

FPC Postpones Rate Hearing

THE Federal Power Commission recently announced its postponement to December 14th of the hearing previously set for November 17th pursuant to an investigation instituted by the commission on its own motion of the rates and charges involved in a 10-company power pool, known as the "Southwest power pool," to furnish electric energy to the Defense Plant Corporation's Lake Catherine aluminum plant in Arkansas. The hearing will be held in Little Rock, Arkansas.

In its original order setting the matter down for hearing, the commission stated that the investigation conducted by its staff during the preceding seven weeks had disclosed conditions, facts, and circumstances which warrant a public hearing. The Southwest power pool is comprised of: Arkansas Power & Light Company, Kansas Gas & Electric Company, Louisiana Power & Light Company, Mississippi Power & Light Company, Nebraska Power Company, Oklahoma Gas & Electric Company, Public Service Company of Oklahoma, Southwestern Gas & Electric Company, Southwestern Light & Power Company, and Texas Power & Light Company.

The original order provided that if the commission, after hearing, shall find that any of the rates, practices, or contracts provided in the intercompany agreements are unjust, unreasonable, unduly discriminatory, or preferential, it will determine and fix, by appropriate order or orders, just and reasonable rates, charges, classifications, practices, or contracts to be thereafter observed. The order also provided that the presiding trial examiner may, after convening the hearing in Little Rock, continue hearings thereafter at such times and places as he may designate.

To Hold Annual Forum

THE Technical Valuation Society will hold its annual forum on December 12th at New York city. The morning session will be devoted to prominent economists, appraisers, and valuation engineers who will present papers and direct discussion on many pressing valuation problems, particularly in their relation to the war effort.

Following a luncheon with guest speakers, the afternoon session will consist of committee meetings and the annual business meeting of the society.

Further information may be obtained from W. C. Fisher, chairman of the program committee, or from C. I. McErlain, chairman of the dinner committee in charge of luncheon arrangements, at the Technical Valuation Society, 33 West 39th Street, New York city.

Northwest Power Pinch Eased

THE Bonneville Administration in a report of its operations to November 1st recently disclosed how tight the Pacific Northwest power squeeze of late summer and fall has been.

According to the administration, the area has been saved from a severe power shortage only by operating Bonneville and Grand Coulee generators at times as much as 10 per cent beyond rated capacity.

In all, the Federal power houses on the Columbia river have been called upon to supply from 40 per cent to 50 per cent of the entire power requirements of Oregon and Washington over the last four months, it was stated. This was caused by one of the driest periods in Northwest history.

While the situation has eased somewhat, it has not completely cleared up, Dr. Paul J. Raver, administrator, said. The easing was attributed to increased October rainfall and to the holdback and accumulation of water in private reservoirs.

While the Bonneville Administration generators delivered heavily to other systems, the November 1st monthly operating report of Bonneville Administration showed delivery to Portland General Electric of about 190,000,000 kilowatt hours, to Washington Water Power and Pacific Power & Light about 150,000,000, to the Tacoma municipal system about 110,000,000, and to the Seattle municipal system about 48,000,000.

In addition to this nearly 510,000,000, about 30,000,000 kilowatt hours have been delivered to other utility systems for transfer to Bonneville customers. These deliveries have been in addition to direct service to war-time industries and other customers.

Alabama

Conservation of Gas Asked

THE gas needs of war plants in the Birmingham area are increasing to such an extent that an appeal was made recently by Colonel James P. Barnes, district director of the War Production Board in Birmingham, to all consumers to conserve and economize in the use of gas.

He declared no shortage was anticipated, even at the peak cold weather period expected in January, but added the war plants' needs made it practical for household consumers to further the war effort by using gas more efficiently. Additional facilities being built by Birmingham Gas Company are expected to forestall any threatened shortage in the district.

The director said, however, that gas conservation is needed not only to help prevent shortages but to save critical fuels.

Bimonthly Meter Reading

THE Alabama Power Company will begin reading electric meters once every two months, instead of monthly, beginning December 15th or as soon thereafter as arrangements can be completed.

Authorizing the plan on November 11th, the state public service commission ordered that for the intervening month during which the meter is not read, the bill will be figured on a basis of approximately one-half the sum of the bill for the previous two months. Adjustments will be made with the next reading.

Arkansas

Rate Cut Rejection Protested

THE state utilities commission on November 6th "respectfully insisted" that the Federal Power Commission reconsider its action in refusing a natural gas rate reduction for five southeast Arkansas towns.

The FPC notified Arkansas officials it would not approve an agreement under which the Memphis Natural Gas Company would reduce its wholesale rates to the Arkansas Power & Light Company about $4,800 a year. The state commission already had directed the AP&L to pass on the saving to its gas customers at McGehee, Dermott, Lake Village, Eudora, and Wilmot.

Rejection of the agreement was based on the fact that the Memphis Natural Gas Company did not at the same time reduce its rates to distributing companies in Mississippi and Tennessee, other than the city of Memphis.

Replying to the FPC, P. A. Lasley, special attorney for the state commission, suggested that the "consumers in Arkansas should not be penalized because those in Mississippi and Tennessee have not asked for a reduction."

Company Offers New Contract

BECAUSE requirements for temporary power at the Jones Mill aluminum plant near Hot Springs have been reduced below original estimates, the Arkansas Power & Light Company has offered to make a new contract with the Defense Plant Corporation which would save the government $1,330,000, officials of the power company said recently.

The power company was awarded a 2-year contract last December to supply 65,000 kilowatts of interim power until the aluminum mill's own power plant could be built. An energy rate of 4 mills per kilowatt hour was provided under this contract.

Recently it was found that the amount of power that would be required from the power company would be only 40,000 kilowatts because the mill's own power plant was enlarged, AP&L officials said. The power company has offered to reduce its contract to 40,000 kilowatts.

California

Transit Plan Rejected

THE voters of San Francisco last month defeated by 100,904 to 94,243 a proposal that the city acquire the Market Street Railway for $7,956,000 through revenue bonds.

Defeat of the proposal was said to leave the status of the Market Street Railway undecided, since no alternative plan had been formulated by either the city's representatives or the Market Street Railway Company's managers.

Connecticut

Line Connections Approved

THE Federal Power Commission on November 4th announced the use of a 25,000-kilowatt interconnection at New Britain between the transmission lines of the Connecticut Light & Power Company, and those of the Connecticut Power Company, would save about 25,000 to 30,000 tons of coal a year in the New England area and a corresponding reduction in the use of rail transportation facilities.

The commission's approval of the interconnection was asked by the Connecticut Light & Power Company, and the approval was granted. The action taken was in line with advice of the Office of Defense Transportation to the FPC. ODT advised that interconnections of electric facilities which will conserve the use of transportation facilities for coal, either by reduction in length of haul or amount of coal used, would assist in the war program.

The proposed connection, for which a substantial part of the facilities have been in place for several years, will have a transfer capacity

of 25,000 kilowatts. The facilities to be connected are limited in capacity, however, to a transfer of 10,000 kilowatts when the transfer is superimposed on the loads of the respective systems.

A project preference rating for necessary materials has been issued by the War Production Board.

The FPC on November 6th announced its order determining that the emergency use of a connection between facilities of the Connecticut Light & Power Company, Hartford, and the Mystic Power Company, Mystic, would not affect the status of the Connecticut Company under provisions of the Federal Power Act. Use of the connection will make possible additional power supply to the system of the Narragansett Electric Company in the Westerly, Rhode Island, area through transfer of energy at a rate not to exceed 10,000 kilovolt-amperes from the Mystic Company's generators to help carry the Narragansett Company's increased war loads. The resulting deficit in the Mystic Company's power supply will be met by a transfer from the Connecticut Company's system through the interconnection, located at Whipple Junction, Connecticut.

Commission approval of the use of the connection was asked by the Connecticut Light & Power Company in an application filed under emergency authority granted the commission by § 202 of the Federal Power Act.

District of Columbia

Commission Rejects OPA Plea

As a final bit of business before leaving for the National Association of Railroad and Utilities Commissioners' convention in St. Louis last month, the District commission rejected an OPA petition that the order for a $200,000 gas rate increase be stayed until the case could be reconsidered.

Minority commission member, Gregory Hankin, who accompanied Chairman James H. Flanagan to the convention, dissented from the order.

On November 16th the commission denied a petition for reconsideration. This was viewed as clearing the way for an early court test. OPA utilities counsel was later denied a temporary restraining order.

Iowa

Move to Buy Gas Utility

By a 5-to-3 vote, the Council Bluffs city council on November 5th awarded Guy C. Myers, New York investment broker, a contract to act as agent in the city's proposed purchase of the Council Bluffs Gas Company.

The contract was awarded with a resolution amending it so that a portion of it making Myers the agent in any deal with the Nebraska Power Company was clipped out.

The amendment was offered by Alderman George Steinberg, and provided that the only facility covered by the contract should be gas, excluding the electric utility. It also provided that the contract be awarded only with that specific amendment included.

The city council subsequently set December 9th as the date for Council Bluffs' voters to decide whether the city should purchase the Council Bluffs Gas Company.

At the same time, they will vote on the acceptance of an assignment of the contract now in force between the Council Bluffs Gas Company and the Northern Natural Gas Company, and whether the system if purchased should be placed into the hands of a board of trustees.

Louisiana

Natural Gas Unit Purchased

Joint purchase of the natural gas transmission and distribution system of the Southwestern Gas & Electric Company serving the Mississippi coast by Gulfport, Biloxi, and Pass Christian was announced by city officials of Gulfport on November 6th. The sale will be subject to ratification by the electorate of the respective cities at a special election to be held December 8th.

Acquisition of the properties was made possible by the Holding Company Act passed several years ago by Congress, wherein the Securities and Exchange Commission was given authority to order the integration of utility holding companies. Sales of the coast gas properties was decided upon by company officials to comply with provisions of this act.

The cost of acquiring the system will be realized from the sale of bonds to be paid

solely from the earnings of the enterprise and in no way will the cities be obligated or authorized to use *ad valorem* taxes or other funds.

Mississippi

Company Loses Suits

THE Mississippi Power & Light Company last month lost two efforts to prevent the Federal Power Commission from conducting a special investigation to learn the whereabouts of certain records of the power company.

The United States Circuit Court of Appeals upheld in two suits the ruling of the United States District Court of the Southern District of Mississippi. One of the suits was brought by the company against the FPC and the other was directed by the company against the investigators as individuals.

On May 27th the FPC issued an order stating that there was reason to believe that certain records of the power company were withheld or destroyed in violation of the Federal Power Act and that these records were material to the commission's examination of costs of the company's property and a reclassification of its accounts.

The order of the commission directed that an investigation be conducted to learn the whereabouts of the records and to discover whether the act had been violated.

The power company then filed suit against the commission asking that the court review the commission's order. The commission countered with a motion to dismiss the company's suit on the grounds of lack of jurisdiction. The lower court dismissed the suit and its ruling on November 3rd was affirmed by the court of appeals.

The power company also asked an injunction directed against George Slaff and other investigators of the commission as individuals.

This also was dismissed by the lower court and the ruling was affirmed by the court of appeals.

New York

Obtains Higher Gas Rates

THE state public service commission on November 14th closed an investigation of gas rates charged by the Central New York Power Corporation, approving increases giving the company $350,000 additional revenue yearly.

The new rates have been in effect in the Syracuse and Baldwinsville area since April 29th. The company originally asked for an increase of $465,000.

In closing the proceedings, the commission ordered release to the corporation of moneys collected under the new rates and impounded pending the investigation.

Utility Wins Stay

THE Federal Circuit Court of Appeals in New York city on November 10th temporarily stayed, pending decision, an order of the Federal Power Commission directing the Niagara Falls Power Company to write off $15,537,943 from its accounts, an amount which the commission held was carried on the company's books in excess of legitimate original cost of its power project at Niagara Falls.

The following are some of the conditions upon which the temporary stay was issued:

That pending appeal the petitioner declare and pay no dividends except upon order of this court upon motion and hearing.

That prior to decision on appeal the petitioner will make every reasonable effort to do whatever is necessary for a prompt compliance with the commission's order of June 9, 1942.

That the petitioner will furnish a certified copy of the stay order to each regulatory commission or other agency, both state and Federal, having jurisdiction over the financial structure of the petitioner or its security issues, or having authority to require the petitioner to file financial or other reports.

That the petitioner will notify the stockholders of its parent company that the petitioner preferred this stay to the alternative offered in the commission's amended offer.

Utility Purchase Urged

LEADING a group of speakers who urged city acquisition of the Staten Island Edison Company plant at a cost not exceeding $14,500,000, Controller Joseph D. McGoldrick told the New York city council finance committee recently that the purchase was a bargain that should be snapped up without delay.

Unless the city bought the plant, the controller warned, it would fall into private ownership, with the result that rates would remain as high as the present level. He pointed out that the prevailing low interest rate would permit the city to finance the purchase advan-

tageously, and said that the city must act immediately to take advantage of the opportunity.

In his brief, the controller said that more than 2,000 cities in the United States had operated their own power plants without one instance of failure.

Mr. McGoldrick said the only valid objection raised by Charles H. Tuttle, former United States attorney, and his associates, was the question of principle involving the city's participation in private business. He urged the committee to let this question go to the city's voters on a referendum to be held next January 30th.

Maurice P. Davidson, trustee of the New York State Power Authority, said that experience had shown that cheaper rates resulted from municipal ownership than from private ownership.

Mr. Davidson said the state agency neither favored nor disapproved any particular purchase, adding that each case must be considered on its own merits.

Other speakers who favored the purchase were Dr. John Bauer, director of the American Public Utilities Bureau, who spoke for the city affairs committee; Clifford T. McAvoy of the CIO; Copal Mintz of the American Labor party; Joseph G. Glass, labor attorney; Noel Watlers of the Amalgamated Clothing Workers Union; Nathaniel Minkoff of the International Ladies Garment Workers Union; and Dr. Harry W. Laidler, former councilman.

South Carolina

Power Merger Delay Asked

THE proposal of the South Carolina Electric & Gas Company, of Columbia, and the Lexington Power Company that they be consolidated into one corporation has become stalled, for the time being, at least. Representatives of the companies last month proposed and got a postponement of the hearings on their application before the state public service commission.

It was reported that the companies may submit an amended merger plan. If so, the case would be entirely reopened.

Tennessee

Power Rate Surcharge Removed

MAYOR Walter Chandler of Memphis on November 6th, the eighth anniversary of the city's decision to run its own electric system with TVA power, announced a 15 per cent surcharge on residential rates would be removed in April, 1943.

Memphis is the only large city using TVA power that adds a surcharge to standard TVA rates.

A recent report by the city comptroller recommended abolition of the charge, and Chandler announced the city commission had agreed to the recommendation in so far as residential rates were concerned.

Texas

New Odorant Plan Suggested

MAJOR natural gas distributing companies of Texas at a special meeting on November 5th submitted evidence upon which the state railroad commission would issue a new gas malodorization order.

Lone Star Gas Company, Community Public Service Company, Brazos River Gas Company, and El Paso Natural Gas Company offered testimony in support of a proposed order which they said would permit gas distributors to prove in courts of law that they probably had odorized their product.

The original order, adopted as a public safety measure soon after the New London school explosion which cost the lives of approximately 300 pupils and teachers, was declared void by the state supreme court because it was "vague, indefinite, unreasonable, incapable of application, and violative of due process."

Power Hook-up Approved

THE Federal Power Commission determined recently that the emergency use of existing interconnections between Texas Electric Service Company, Fort Worth, and West Texas Utilities Company, Abilene, to augment power supply to war production loads served through the "Southwest power pool" will not establish the Texas Electric Service Company as an interstate utility, subject to the commission's jurisdiction under the provisions of the Federal Power Act.

The Latest Utility Rulings

OPA Intervention Fails to Change Order on Rate Increase

FOLLOWING the action of the District of Columbia commission in authorizing higher rates under a sliding-scale arrangement for the Washington Gas Light Company (Order No. 2401), the record was reopened for the purpose of receiving additional evidence from OPA "relating to the inflationary effect, if any, of the increase in rates" (Order No. 2404). After the receipt of such evidence the commission denied a petition of the Price Administrator of the Office of Price Administration on behalf of the Director of Economic Stabilization that the rate order be vacated (Order No. 2418).

Disagreement between Commissioner Hankin and the other members of the commission developed with respect to the effect of the act of October 2, 1942, amending the Emergency Price Control Act of 1942, to provide for notice to and intervention by a government agency in rate cases. The record in the case had been closed prior to approval of this amendment, and the commission pointed out that, because of a prehearing conference on August 14th, attended by counsel for the OPA and participation by OPA in the hearing, there was "anticipatory compliance" with the statute.

Commissioner Hankin dissented and expressed the view that the rate order should be vacated and the case reopened for the purpose of arriving "at a correct rate structure without limiting the Director of Economic Stabilization to the development of evidence relating solely to the inflationary effect of the ordered increase." Holding that the relatively small increase in rates per customer was not the only matter involved in connection with "inflationary tendencies," Commissioner Hankin said:

> Yet, if one is to balance economic factors in order to determine inflationary effects, is it not pertinent to consider whether the rates are not already inflated? If a rate is unreasonably low, an increase may be justified. It may not be inflationary, because it would merely bring this cost into proper balance with other costs. But if a rate is unreasonably high, it already contributes to the inflationary effect, which should be removed. Does it not, therefore, become the function of the director to see whether the rates should be lowered, rather than raised? Under the act of October 2nd, the Director of Economic Stabilization is given a right to intervene, a right without limitation. For the commission to say to him that he may intervene, but may not go into all elements of fact and law which he may deem necessary for the determination of the reasonableness of the rate, is to deny him his statutory right as effectively as if the petition were denied outright. (Dissent to Order No. 2404.)

Counsel for the Price Administrator, on the reopening, presented evidence to show that the amounts used by the company for Federal income taxes in its determination of the amount available for increase in rates was overstated by approximately $18,000 because the Revenue Act of 1942 as finally approved contained a provision exempting from surtaxes that portion of the company's income paid out in preferred stock dividends.

The commission pointed out, however, that in determining the amount available for a rate increase it had used neither the computation of the company nor the commission witness, but substituted as a reasonable allowance for Federal income taxes 31 per cent of the company's taxable income for the test year ended June 30, 1942. It was said that accordingly the evidence presented by counsel produced a figure for Federal income taxes approximately $130,-

000 in excess of the amount actually allowed in the commission's determination. (Order No. 2418.)

Commissioner Hankin, on the final order, wrote a long dissent reiterating and expanding his views on the scope of the proceeding, the effect of the Price Control Act, and what he considered to be errors in the commission's original rate determination. *Re Washington Gas Light Co. (Order Nos. 2404, 2418, Formal Case No. 316).*

Discriminatory and Monopolistic Provisions Eliminated from Rate Schedules

LOWER natural gas rates were ordered by the Federal Power Commission with the consent of the companies involved. The commission held that an annual rate of return of 6½ per cent was reasonable for the purpose of fixing charges for sales and transportation in interstate commerce of natural gas for resale. At the outset the companies raised a question with respect to their status under the Natural Gas Act, but before the hearings were concluded they specifically waived further hearing in connection with the proceeding and acknowledged their status as natural gas companies under the act.

The commission, in its order reducing rates, required the elimination of a provision prohibiting El Paso Natural Gas Company from selling or delivering gas in certain territory to anyone other than to Central Arizona Light & Power Company without first indemnifying that company and a provision prohibiting Natural Gas Service Company of Arizona from selling gas purchased from El Paso Natural Gas Company, "which shall result in the loss of revenues to the Salt River Valley Water Users' Association from the sale of electricity." The following provision in a rate schedule of El Paso Natural Gas Company was also ordered eliminated:

> Provided, however, that if Buyer (Arizona Edison Company, Inc.) sells its distribution systems, or any of them, to a municipality or if this contract is acquired by a municipality, Seller (El Paso Natural) shall receive not less than 23 cents per thousand cubic feet for industrial gas and not less than 36 cents per thousand cubic feet for gas sold to domestic customers.

The commission condemned these provisions as unreasonable, unduly discriminatory, and monopolistic. *Re El Paso Natural Gas Co. et al. (Docket Nos. G-257, G-242).*

Rights under Contract Not Enforced by Injunction to Enforce Rate

THE rule that a rate fixed by agreement between a public utility and a consumer is subject to subsequent regulation and control of the state was applied by the supreme court of California in denying the right of a consumer to an injunction against a rate in excess of the rate fixed by contract. The court, however, discussed possible remedies for a consumer who had granted valuable rights in exchange for the rate agreement.

More than fifty years ago a water company had acquired an easement for a water main and had settled a dispute over riparian rights by granting to the landowner a perpetual right to use all the water necessary for irrigation of the property at a specified rate. In 1937 a successor company had notified the present owner of the land that it was abandoning the easement and that service would be rendered pursuant to the company's applicable rules and regulations and to the company's rates applicable for such service on file with the California

commission. This resulted in an action for declaration of rights under the contract to obtain, among other remedies, an injunction permanently enjoining the company from raising the rates.

Under the evidence it was concluded that the water had been dedicated to a public use. Evidence of such dedication was found in the filing of a condemnation action, the purpose of the company's organization, the authorization of service together with the fixing of rates by a city, and the receipt of applications for service. Whether the landowner had knowledge or lack of knowledge concerning such dedication was held to be immaterial. Moreover, concluding provisions of each application allowing service to be terminated at the request of either party after a specified period were held not to affect the public nature of the utility.

After appropriation and dedication of the water to public use, said the court, the utility no longer had the right to reserve from its water supply any private interests so as to exclude the exercise of the public regulatory power. After intervention of the public interest by an appropriation and dedication of the landowner's water to a public use, he waived his damages for such a taking in consideration of the grant of a perpetual right to receive the water so appropriated and dedicated by the company. The supplying of water and the rate to be charged for the service is subject to the action of the commission.

Nevertheless, said the court, until the commission has acted to regulate the rates specified in a contract by which water is to be supplied by a public utility, the agreement made by the parties will be recognized and enforced. In the event that the commission orders the company to charge the landowner the same rate as it charges others, the company will thereby be excused from performing its contract, and the landowner would then be entitled to restitution. The company must compensate the landowner in the amount of the value of the riparian right taken from his predecessor in interest together with the value of the easement for the maintenance of the main until it is abandoned. As a credit on such amount the consumer must be charged for the value of the benefits received by him and his predecessor. The court concluded:

> Until the contract rate is annulled by the railroad commission, the appellant may secure adequate compensation for the failure of the respondent to perform its obligations under the contract by an action for damages.

Lamb v. California Water & Teleph. Co. 129 P(2d) 371.

Higher Bus Fares with Concessions to Students Approved

An application for authority to increase local transportation fares from 6¼ cents to 8⅓ cents per token was denied by the Montana commission on the ground that, if granted, it would provide more than a just and reasonable return on the net property value. An increase to 7 cents was, however, approved in order to provide a rate of return of 6 per cent annually, which was said to be a just and reasonable return.

The rate of return earned by the company for the year 1941 was found to be 3.95 per cent, which was not considered a just and reasonable return. Effective April 20, 1942, there were wage increases of 9 cents per hour for drivers and 12 cents per day for washers. New busses had been added to the system, requiring additional depreciation allowances, and the evidence disclosed that there had been a material increase in the cost of all of the parts and materials required by the company. The probability that earnings might be reduced on account of reduced fares for students was also considered.

The commission said:

> . . . some slight increase should be made in order to take care of the increase in wages

and depreciation effective since April 20, 1942.

While the proof disclosed that the company made a reasonable return on its investment for the first four months of the year 1942, the proof also showed beyond a doubt that a considerable part of the increase was due to abnormal weather conditions and an unusually severe winter, which extended well into this period. Based on previous returns, it would not be reasonable to assume that the earnings of the company would be similar for the rest of the year. In fact, as disclosed from the proof offered, the earnings of the company invariably have fallen off during the summer months. Taking into consideration all of the factors so far as known, it would seem that a correction to the extent above indicated is necessary to enable the company to receive a just and reasonable return on its property invested, particularly in view of the low earnings for the year 1941.

The board concluded that students over the age of twelve years attending high schools and a business college, upon presentation of an identification card as to the attendance at any of the schools, should be permitted to ride for a 5-cent fare between the hours of 7:30 A.M. and 4 P.M. on all school days. Students of the business college were also permitted in addition to riding for a 5-cent fare between these hours to ride for a 5-cent fare between 6 P.M. and 9:30 P.M. on all school days. *Re Butte City Lines, Inc. (Docket No. 3402, Report and Order No. 1800).*

Transfer Charge Removed for Duration

A CHARGE of 2 cents for an interline transfer between the lines of the Capital Transit Company and the Washington, Marlboro & Annapolis Motor Lines, Inc., was eliminated, by order of the public utilities commission of the District of Columbia under a plan suggested by the transportation company, for the duration of the existing national emergency or until December 31, 1944, whichever is the earlier. Complaint had been made against this charge by the Fort Davis Citizens' Association on the ground that the Fort Davis area was discriminated against.

The approved plan was submitted because of a question as to the authority of the commission to enter a permanent order eliminating the charge. The proposal was that free transfers should be issued by each company without the companies admitting the authority of the commission to order intercompany transfers but expressly reserving their rights in the premises.

It was shown that large numbers of government employees and other riders would be relieved of the transfer charge if the plan were accepted. The commission said:

> The proposal would not limit in any way the powers or authority of the commission, but would preserve to the companies any legal rights they may have upon the question of the authority of the commission to require free transfers good for transportation over the lines of the two unrelated transportation companies. To the commission it is unthinkable that all of the government employees using the lines of the two companies in reaching Suitland and other government employees engaged in the District of Columbia should continue to pay the additional charge of 4 cents a day in order to permit the commission and the transportation companies involved to litigate a legal question which is not raised by the proposed plan. It is the opinion of the commission that the immediate financial relief to the thousands of passengers using the lines of the two companies is of greater importance than the technical legal question whether the commission has authority to require free transfers between the two unrelated companies. The plan proposed does not involve the authority or power of the commission.

In a dissenting opinion Commissioner Hankin, although stating that he agreed that the charge should be eliminated, declared that this should not be temporary or accomplished by the commission's approval of an agreement "whereby the companies assume to control the commission's regulatory jurisdiction." *Re Capital Transit Co. et al. (PUC No. 3330, Formal Case No. 320, Order No. 2402).*

City Must Pay for Fire Protection

RATE schedules of a municipal water plant were criticized by the Wisconsin commission on the ground that the city had not been paying the lawful rate for fire protection. The charge had varied as the exigencies demanded from a minimum of $500 per annum, so that in effect what the utility had been undertaking had been to have the metered customers pay the costs of the operation of the utility, to the benefit of the fire protection service and the general users' service. The state commission said:

> This is neither equitable nor lawful. Strict adherence to the schedule herein prescribed will alleviate the burden now upon the metered water users and at the same time provide for the payment of the cost by the two classes of general consumers, the metered and the unmetered, and by the city for fire protection, in a manner consistent with the allocation of the cost of rendering the service to these three classes.

Karibolis et al. v. City of Hayward (2-U-1861).

Other Important Rulings

A FEDERAL District Court ruled that the statute authorizing the Interstate Commerce Commission or its agents to inspect records, documents, and correspondence of motor carriers does not violate the constitutional prohibition against unlawful searches and seizures notwithstanding that correspondence privileged under the attorney-client privilege is not excepted from the scope of the statute. It was also ruled that motor carriers, being public utilities, are not to be accorded the same constitutional guaranties of privacy under the Constitution as an ordinary citizen in his private business. *United States v. Alabama Highway Express, Inc. 46 F Supp 450.*

A return of 2.65 per cent was declared by the Montana commission not to be a just and reasonable return on capital invested in the business of transportation as a common carrier, and, accordingly, the commission authorized an increase in token fares on the Great Falls City Lines from 6 cents or four tokens for 25 cents to 8⅓ cents each, or three tokens for 25 cents. *Re Great Falls City Lines (Docket No. 3395, Report and Order No. 1784).*

A court reviewing a commission order granting a certificate, according to a ruling of the supreme court of New Mexico, cannot try the matter *de novo* but can receive and consider only that testimony which has been produced at the commission hearing. *Harris v. State Corporation Commission et al. 129 P(2d) 323.*

A return of 6 per cent on the property invested in a water utility was held to be a reasonable return in a case in which the Montana commission approved a schedule of monthly flat rates for water and also minimum meter charges for water, where in practical effect the rates would not constitute a raise in rates but represented a method of computation which included all appliances using water. *Re Town of Townsend Water Works (Docket No. 3411, Report and Order No. 1801).*

The Pennsylvania commission modified its rules and regulations relating to voltage variation and testing of electric meters because of the war emergency and regulations of Federal agencies relating to the use of materials and because of the necessity for conserving motor equipment. Commissioner Buchanan dissented. *Re Pennsylvania Edison Co. (Application Docket No. 61730).*

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports.*

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Public Utilities Reports

COMPRISING THE DECISIONS, ORDERS, AND RECOMMENDATIONS OF COURTS AND COMMISSIONS

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PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission

v.

Philadelphia Transportation Company

[Complaint Docket No.13608.]

Valuation, § 41 — Rate base — Capital structure as element — Reorganized corporation.

1. Capital structure of a reorganized corporation should be given appropriate consideration in a rate case where the rate question received collateral consideration in the reorganization proceedings, although the Commission reserved to itself in the approval of the reorganization plan the right to fix rates which would not necessarily reimburse the security holders of the new corporation to the extent of providing adequate earnings on the securities, p. 263.

Valuation, § 47 — Rate base — Findings in reorganization proceeding.

2. Independent findings of the various rate base elements should be made in order to develop the fair value of used and useful property in a rate case, although consideration will be given to any fact in recent reorganization proceedings which might assist in the determination of reasonable rates, p. 263.

Return, § 9 — Basis — Fair value — Expenses.

3. The amount of return to be made available by the application of a reasonable rate of return to fair value, plus expenses, depreciation, rentals, and taxes, results in a figure representing the amount which a transportation company may collect from its patrons for service, p. 264.

Valuation, § 183 — Paving obligations — Paving expenditures.

4. The original cost of a transit company's used and useful property should not include paving costs representing an accumulation of annual paving obligations and cost of paving which has long since disappeared, p. 265.

Valuation, § 207 — Capital charges — Spare parts for equipment.

5. The original cost of a transit company's used and useful property should include passenger equipment spare parts, p. 267.

Valuation, § 193 — Exclusions from rate base — Property not used.

6. The original cost of a transit company's used and useful property should not include cost of buildings not used and useful in public service or indirect costs applicable thereto, p. 267.

Valuation, § 79 — Reproduction cost determination — Price estimates — Trended estimates.

7. Reproduction cost estimates should be based upon independently priced estimates rather than upon trended estimates, p. 267.

Valuation, § 75 — Reproduction cost determination.

8. Reproduction cost estimates are vague and indefinite indications of current property costs, p. 267.

Valuation, § 39 — Measures of value — Reproduction cost.

9. The Commission, in determining the fair value of a transit company's used and useful property for rate making, gave only such weight to reproduction cost estimates as appeared proper, since some estimates were based upon uncertain and fugitive data, and it felt that certain reproduction cost estimates were only an illusory certainty, p. 267.

Valuation, § 82 — Ascertainment of accrued depreciation — Elements of depreciation.

10. Physical causes of depreciation such as wear and tear, decay, and action of the elements should be considered in estimating accrued depreciation, p. 271.

Valuation, § 96 — Ascertainment of accrued depreciation — Factors considered.

11. Accrued depreciation determinations should be based upon such factors as age, use, wear and tear, action of the elements, obsolescence, inefficiency, inadequacy, and demands of public interest and of public authority rather than upon any formula resulting from mathematics of finance or managerial policies which act to set up a financial reserve, sinking fund, or other device designed to amortize the capital invested in property consumed by the action of depreciatory forces, p. 271.

Valuation, § 101 — Ascertainment of accrued depreciation — Observation method.

12. Accrued depreciation estimates based on observation and study of the property and giving predominant weight to nonphysical elements such as impact of changes in the art, public requirements, obsolescence, inadequacy and supersession are unreliable, p. 271.

Valuation, § 100 — Ascertainment of accrued depreciation — Age-life method.

13. Accrued depreciation of transit company property should be determined by the age-life straight-line method, p. 271.

Valuation, § 225 — Property to be purchased — Securities outstanding — Equipment trust bonds.

14. Equipment trust bonds which are to be issued to finance the purchase of busses already ordered should be considered as part of the securities outstanding in determining fair value of a transit company's property for rate making, p. 278.

Valuation, § 41 — Securities outstanding — Capital surplus.

15. Capital surplus should not be recognized as a part of securities outstanding and surplus, in determining fair value of a transit company's property for rate making, when adoption by the company, for accounting purposes, of findings in its reorganization case would not have made possible the creation of a capital surplus, p. 278.

Valuation, § 42 — Security values — Par values — Market values.

16. The par or stated values and market values of a transit company's outstanding securities should be considered by the Commission in determining the fair value of the company's used and useful property for rate making, p. 278.

Valuation, § 293 — Working capital — Operating charges — Prepayment for service.

17. A working capital allowance for a transit company should not include an allowance for the expenses of operation, exclusive of taxes and depreciation, since service is rendered on a cash prepayment basis, p. 279.

Valuation, § 114 — Cost of financing — Transit company.

18. Financing costs of a transit company equivalent to 4 per cent of the determined original cost depreciated were considered by the Commission in determining the fair value of the utility property for rate making, although such an allowance seemed unduly liberal for rate-making purposes, p. 280.

Valuation, § 224 — Operating equipment — Partially delivered equipment.

19. The cost of operating equipment which has been ordered and partially delivered should be considered in determining the fair value of a transit company's property for rate making, p. 280.

Return, § 9 — Basis for computation — Fair value of property.

20. Reasonable rates for public utility companies should be based upon a fair return on the fair value of used and useful property, p. 282.

Return, § 9 — Basis for computation — Fair value of property — Opinion evidence.

21. Opinion evidence as to fair value and return thereon should be disregarded where such evidence is based on only one of the elements of value, p. 282.

Return, § 35 — Reasonableness — Economic conditions.

22. Distress situations with respect to a public utility should not be given weight in reaching a proper rate of return, p. 282.

Return, § 108 — Transit company.

23. A 6 per cent rate of return on the fair value of a transit company's property was held to be proper and reasonable, p. 282.

Expenses, § 10 — Future estimates — Abnormal conditions.

24. The Commission, in making an allowance for operating expenses of a transit company, gave controlling weight to the actual experience in past twelve months and considered experience in previous periods only as it appeared necessary in making proper future allowances, in view of the fact that rapidly changing conditions were resulting in changes in operating costs from month to month and year to year, although it would ordinarily base its allowance upon experience over a period of years, p. 289.

Expenses, § 46 — Donations — Charitable contributions.

25. Donations for charitable purposes should not be allowed as an operating expense of a transit company, p. 290.

Expenses, § 91 — Rate case expenses — Excessive rate proposals.

26. Rate case expenses should be excluded from allowable operating expenses of a transit company where proposed rates are greater than reasonable rates, p. 290.

Expenses, § 77 — Materials and supplies — Accounting changes.

27. Operating expenses of a transit company should not include the cost of materials and supplies where, owing to changes in accounting methods, the

cost of such materials has greatly increased over their actual cost on the books of the company, p. 291.

Expenses, § 11 — Abnormal or nonrecurring expense — Payment of assumed obligations.

28. Allowable operating expenses of a transit company should not include payment of a note which secured a loan to an association consisting of employees of the transit company and which was assumed by the company, since it was a nonrecurring charge, not a normal operating charge, and not a normal labor cost, the loan having been incurred by the association prior to the existence of the transit company, p. 291.

Expenses, § 114 — Income taxes — Theoretical payment.

29. Federal and state income taxes should be excluded from the allowable operating charges of a transit company where it is apparent that no income taxes would be paid and where tax accruals were made on the company's books on the basis of the book net income and not upon the basis of income reported in the tax returns, p. 294.

Expenses, § 111 — Corporate loans taxes.

30. State corporate loan taxes and taxes on bond interest should be excluded from a transit company's allowable operating expenses, since they are a function of interest cost, p. 294.

Expenses, § 109 — Taxes — Property not used.

31. Taxes applicable to property not used or useful in the public service should be excluded from the allowable operating charges of a transit company, p. 297.

Valuation, § 41 — Rate base — Securities approved in reorganization.

32. The Commission, in a rate proceeding, is not obligated to fix a rate base equivalent to or more than the total of the capital securities issued by the company with Commission approval following reorganization of a predecessor corporation, p. 305.

Expenses, § 58 — Payments to municipality.

33. Payments by a transit company, pursuant to an agreement, to the municipality in which it operates to provide the city with funds with which it may exercise an option to purchase, should be allowed as an operating expense, p. 309.

Valuation, § 40 — Rate base — Reproduction cost.

Discussion of the necessity of considering reproduction cost less depreciation in determining the rate base, p. 307.

Valuation, § 21 — Rate base — Fair value rule.

Criticism of a "judgment" figure under the "fair value" rule of Smyth v. Ames, and statement that only statutory standards apply to ratemaking, to the exclusion of judicial fiat, p. 311.

(BUCHANAN, Commissioner, dissents; BEAMISH, Commissioner, concurs in separate opinion.)

[September 9, 1942; October 13, 1942.]

INVESTIGATION *of proposed increases in transit company rates; increases denied.*

By the COMMISSION: This case arises out of the action of the Philadelphia Transportation Company in filing two new tariffs, intended to become effective January 15, 1942, one of them Tariff Rail Pa. P. U. C. No. 3, providing increases in passenger rail fares, the other providing principally for decreases in passenger bus fares. These proposed changes provide for uniformity of charges for mass transportation service in Philadelphia as rendered by the Philadelphia Transportation Company, at a basic rate of three tokens for 25 cents, or a fare per ride of 8⅓ cents. The cash fare would be 10 cents per ride. The presently effective tariff provides a rail rate of two tokens for 15 cents, or 7½ cents per ride, whereas there is a straight 10-cent charge for a bus ride. At present the cash rail fare is 8 cents.

The Commission took action to suspend the operation of these two tariffs for a period of six months to July 15, 1942, and took further action to suspend their operation until October 15, 1942.

Hearings were begun on January 6, 1942, and were concluded on July 31, 1942. The record, which consists of 3,378 pages of printed testimony and many volumes of exhibits, was completed on the latter date and the case is now before us for disposition.

While the instant case involves the increased fares contemplated by tariffs filed by Philadelphia Transportation Company, the rates in these tariffs apply as well to the Market Street Elevated Passenger Railway Company and Chester and Philadelphia Railway Company, both of these companies being owned by Philadelphia Transportation Company. The evidence relating to property costs and operations relates to all three companies, the property being integrated and operated as a single transportation system. Accordingly, this order will be on the basis of consolidated operations.

At the initial hearing, counsel for respondent made a comprehensive statement of respondent's position, including therein the reasons why respondent felt it necessary to obtain additional revenues. His statement in this respect is as follows:

"If we can be sure that our earnings will be such as to maintain our credit we'd be perfectly willing to report to you the returns in the future month by month. But today, the months, as we have experienced them, show a downward trend that destroys our credit, and may well hamper us in giving the service this city needs at this time when it needs it the most. And that means, sir, two things, maintaining operations, even expensive operations, maintaining operations and maintaining credit. We want both. And that is why we have filed these tariffs. If there had been no emergency we would never have filed them. We were making good on the forecast that we made in the reorganization case.

"But we are not magicians; we can't be the only servant in America that isn't paid more for what he sells despite he must pay more for what it takes to sell it.

"Our immediate burden is on us now. I mentioned your Honors have included a temporary rate power in this investigation as well as the overall rate case. I want you to bear that in mind, because when one has to meet

an emergency and needs help, if the help comes too late the emergency is not met."

On several occasions during the progress of the hearings, several members of the Commission suggested to respondent that it consider the advisability of withdrawing the new tariffs and continuing operations on the basis of the present fares. The suggestions were finally acted upon by respondent's board of directors, who authorized the conditional withdrawal of the new tariffs. Owing to these conditions we deemed it advisable to continue the case and make an adjudication in due course.

In answer to the suggestions of the Commissioners with respect to withdrawal of the new tariffs, counsel for respondent, at the hearing on May 26, 1942, made the following statement:

"At the moment the company is not in financial emergency. When the petition for a temporary rate order was filed the company felt acutely the presence of the financial emergency, having large capital financing to do and having not yet experienced the upward trend of riding which has brought with it the upward trend of revenues, we are not now pressing our motion for a temporary rate order.

"If, as, and when it comes about that we feel we are in an emergency we will come to you and tell you about it. But I think I should frankly say that the emergency which we faced earlier this year, we got through, and we are not now facing any emergency."

In the foregoing remarks it will be noted that counsel referred to a petition for a temporary rate order allowing increases in fares. Such a petition was filed; however, on June 2, 1942, the Commission handed down an order allowing withdrawal of said petition.

It should be pointed out that the Commission's order instituting the inquiry and investigation on its own motion provided that consideration should be given to the imposition of temporary rates, by virtue of the authority vested in it by § 310 of the Public Utility Law. Such provision did not specifically contemplate either a temporary increase or a temporary decrease, but merely left the way open for the imposition of some form of temporary rate if such action appeared advisable as the record developed.

Upon petition for leave to intervene in the instant case by Leon Henderson, Price Administrator, of the Office of Price Administration, the Commission, on June 16, 1942, permitted such intervention, subject to the condition that it would not broaden the issues involved in the proceeding.

Philadelphia Transportation Company began business on January 1, 1940, and resulted from the reorganization of the Philadelphia Rapid Transit Company, approved by the Commission under date of November 22, 1938, 26 PUR(NS) 154.

The first order of the Commission relating to the reorganization, docketed to A. 33559, was an order nisi and was dated August 2, 1938. Exceptions were filed thereto and, on October 3, 1938, the Commission issued an order in disposition of the exceptions. (Both orders printed in 26 PUR(NS) 65.)

Under date of November 17, 1938, a petition for reconsideration was filed by Philadelphia Rapid Transit Compa-

ny and after consideration thereof the Commission issued its final order, dated November 22, 1938, *supra*, at p. 155, which provided: "That the proposed plan of reorganization filed by applicant, Philadelphia Rapid Transit Company, and dated December 1, 1937, as amended June 1, 1938, as amended November 15, 1938, be and same is hereby approved."

The Commission stated in its report and order of November 22, 1938, *supra*, at p. 155, that the same "should not be construed as requiring the Commission in any proceeding brought before it under the Public Utility Law of the commonwealth of Pennsylvania for any purpose, to fix a valuation which shall be equal to the total of the securities proposed under the applicant's plan, or to approve or prescribe a rate which shall be sufficient to yield a return on said securities; . . ."

[1] However, in the order nisi, dated August 2, 1938, *supra*, the Commission stated at the outset that in passing therein upon a plan of reorganization the Commission gave consideration to three basic matters; first, the original cost of the property in relation to the total amount of securities to be issued by the new corporation; secondly, the past, present, and future earning power of the property under reasonable rates; and third, the distribution of securities among the various participants in the plan. Although the Commission reserved to itself in the approval of the plan of reorganization the right to fix rates which would not necessarily reimburse the security holders of the new corporation to the extent of providing adequate earnings thereon, nevertheless the rate question received collateral consideration and it therefore seems proper that the capital structure of the reorganized company, namely, Philadelphia Transportation Company, be given appropriate consideration in this rate case.

The first plan of reorganization contemplated the issuance of capital securities to the extent of $174,105,476.29. The plan finally approved by the Commission on November 22, 1938, provided for the issuance of capital securities in the amount of $85,015,193.42.

[2] It should be emphasized at this point that the plan of reorganization as finally approved was primarily a compromise between many divergent interests. The reorganization proceedings were begun in 1934, but the plan of reorganization proposed at that time, and various others formulated thereafter, were not acceptable to all the interested parties. The plan as approved involved the merger of Philadelphia Rapid Transit Company and sixty-four so-called underliers, many of which had outstanding stocks, stock trust certificates, collateral bonds, and mortgage bonds, in the hands of the public, and the holders of each group of such securities had to be reckoned with before the plan could become operative. Even as finally approved, the necessary consents were not obtained from holders of bonds of one underlier, and special provision had to be made for them under the court order of approval. The Commission's approval, therefore, should not be construed as ratification of various values involved in the reorganization proceedings, but rather as a frank recognition that the public interest could be best served by acquiescing in a plan which, with one exception, had the approval

of all groups, and thus open the way for normal operations after four years of contention, litigation, and bankruptcy. All that the order of November 22, 1938, means is that the ultimate amendment to the plan as proposed in the petition for reconsideration with respect to the total amount of capital securities proposed to be issued was reasonable and on that basis, and on that basis alone, was Commission approval given thereto. In other words, in the adjudication of the proceeding now before us we can and will make independent findings of the various rate base elements, from which we will develop the fair value of the used and useful property, although we will give consideration to any fact in the reorganization proceedings which may assist in the determination of reasonable rates to be charged by Philadelphia Transportation Company.

The record in the reorganization case, as well as the records in certain securities and other cases involving Philadelphia Rapid Transit Company and Philadelphia Transportation Company, have been incorporated in this record by reference subject to certain limitations.

Before the effective date of the rates described by Rail Tariff No. 3 and Bus Tariff No. 3, complaint against them was filed by the city of Philadelphia. This complaint has been docketed to C. 13595. At the initial hearing held on January 6, 1942, a motion was made to consolidate the city's complaint and the Commission's case for the purpose of hearing and disposition. The consolidation was allowed for purpose of hearing only. Therefore, the Commission will dispose of its own case only (C. 13608) in this order, and a separate order will be issued in disposition of the city's complaint.

[3] In this order nisi we shall make findings upon three initial points. We shall determine the fair value of the property which respondent uses in the rendition of service to its patrons; we shall determine the amount of return to be made available by the application of a reasonable rate of return to the fair value; and we shall determine what allowances are to be made for operating expenses, annual depreciation, rentals, and taxes. The return plus the expenses, depreciation, rentals, and taxes results in a figure representing the amount which respondent may collect from its patrons for service.

The record includes evidence on the following matters:

I. The elements of fair value:
   - A. Original cost
   - B. Reproduction cost
   - C. Accrued depreciation
   - D. Book cost and depreciation reserve
   - E. Securities outstanding and corporate surplus
   - F. Working capital
   - G. Cost of financing
   - H. Investment in additional equipment during 1942
   - I. Fair value

II. Rate of return

III. Revenues, expenses, taxes, rentals, and annual depreciation

Under each section of Part I the evidence pertaining to the elements of fair value will be stated and will be discussed as to quality, together with the basis for our conclusion. These conclusions will be summarized and

weighed in determining the fair value of the property.

I. The Elements of Fair Value

A. Original Cost

Estimates of the original cost of respondent's property as of December 31, 1941, were submitted by respondent through Henry E. Ehlers, vice president of Day and Zimmermann Inc., and by the Commission through George B. Taylor, advanced transit engineer. Ehlers' estimate amounts to $117,155,000 and Taylor's comparable estimate produces $104,469,084. These estimates include direct and indirect costs, but do not include provisions for materials and supplies, working capital, or cost of financing. These two estimates are summarized with our allowances in Appendix A.

A review of the estimates indicates that the two engineers are in close agreement with respect to all but three accounts, namely, 511—Paving, 530-33—Passenger Cars, and 404—Miscellaneous Physical Property. These three accounts will be discussed in ensuing paragraphs.

Account 511—Paving.

[4] The estimate made by Ehlers for paving amounts to $15,013,000, whereas the Taylor estimate amounts to $3,150,998, a difference of $11,862,002. The paving question was before the Commission in the reorganization proceedings of Philadelphia Rapid Transit Company at A. 33559. As pointed out in the order nisi, dated August 2, 1938, *supra,* the company included in the original cost for Account 511—Paving, a sum which was $11,861,891 in excess of the amount shown for the same account by the Commission staff. This difference is virtually identical with the difference of $11,862,002 now existing between the Ehlers and Taylor estimates. In support of the adoption of the amount determined by the Commission staff, the Commission made the following statement in the order nisi:

"Account No. 511—Paving, in Applicant's Exhibit 9, is $11,861,891 in excess of the amount shown for the same account by the Commission staff. The Commission staff consistently followed the practice of inventorying and determining original cost only on physical property in existence as of the time of determination. It found $3,129,109 of paving placed by the system still in existence. Applicant claimed $14,991,000 which included the cost of paving which had long since disappeared. Applicant stated that it did not care whether the paving was in existence and in fact that it was not in existence but that applicant was including the amount as the cost of electrification franchises obtained about 1895.

"When franchises were granted to the street railway companies many contained a provision requiring paving, repaving, repair, and maintenance of the streets traversed by the route covered in the franchise. The street railway companies were negligent in observing their obligation in respect to paving and the city found it necessary to do the paving and to sue the companies to recover the cost. In several cases carried to the supreme court of Pennsylvania the city was able to recover from the street railway companies the costs incurred by it in doing the paving required of the companies by their franchises. As a result it was

definitely determined that the paving obligation contained in street railway franchises was enforceable although the street railway companies were still reluctant to fulfil their obligation. (Philadelphia v. Ridge Ave. P. R. Co. [1891] 143 Pa 444, 22 Atl 695; Ap. Ex. 23 A, Vol. A 4, p. 1739; Phila. Jour. Com. Council, I, 1892, Appendix 8; Second Ann. Message of Mayor, Vol. 4, Phila. 1892, p. 57; Philadelphia & Gray's Ferry P. R. Co. v. Philadelphia [1876] 11 Phila [Pa] 358; 13th & 15th Sts. P. R. Co. v. Philadelphia [1883] 16 Phila [Pa] 164.)

"When the Philadelphia City Councils were approached for permission to use the electric motive power, or the so-called trolley system, they insisted that the delinquency in paving which had accumulated over a long period of years be made good as a condition of their grant of supplementary rights under the original franchises. (Phil. Jour. Select Council, Vol. 1, 1892, Appendix 67 & 32.) It would appear therefore that the paving which was done in 1895 and subsequent years was not an obligation of the trolley franchises but rather an accumulation of annual obligations under the original street railway franchises. Other current obligations under some of the street railway franchises included snow removal and sprinkling of streets both of which were covered in annual operating expenses just as the current paving had been covered in those years in which the obligation was observed. 1907 Agreement, city of Philadelphia with PRT Co. Applicant does not capitalize the expenditures which had been made annually from 1857 for paving and such things as snow removal and sprinkling of streets and it is difficult to see why an accumulation of its paving obligation should be permitted to be capitalized. Moreover, the paving obligations of all companies were changed by the city of Philadelphia in the 1907 agreement with PRT. This agreement converted the varying annual paving obligation into a fixed annual payment starting at $500,000 a year and increasing by steps every ten years, yet PRT does not include the sum of these annual paving payments as a figure to capitalize for franchise cost. This annual lump payment is made for the same obligations as the heavy expenditures for an accumulation of the obligation about 1895.

"The Commission is mindful of the fact that overcapitalization with inability to meet fixed charges has brought applicant to its present problem of reorganization. For the Commission to permit applicant to use an evanescent item such as an accumulation of annual paving obligations or of taxes as a basis for the issuance of securities would be merely to invite a repetition of financial difficulties in the near future." (26 PUR(NS) at pp. 82, 83.)

Further review of this question confirms us in our view, as expressed in that order nisi, that the amount for the original cost of paving should not exceed the estimate made by the Commission staff. There can be no justification for requiring the ratepayer to pay an annual charge imposed on the company in full satisfaction of a previous obligation and at the same time require payment of a return on the prior investment in that obligation.

This is particularly apparent in consideration of the fact that most of the physical property comprising the original investment has long since disappeared and has been replaced without cost to respondent or its predecessors. Accordingly, we will allow for paving the sum of $3,151,000, based on the Taylor estimate.

Accounts 530–533—Passenger Equipment—Spare Parts.

[5] In Exhibit No. 35, respondent shows a list of spare parts of passenger equipment at a total cost of $420,150, which, according to the exhibit, are not included in original cost as determined by the Commission staff. Reference to the estimates of April 1, 1935, and of October 1, 1937, in the reorganization case, discloses that no inventory or appraisal of spare parts as such appears therein. Reference to the aforesaid Commission's order nisi issued at A. 33559, *supra,* discloses the Commission's witness testified that items of spare parts were included in the Commission's estimate of material and supplies. The record in the instant proceeding shows that such items are not included in materials and supplies as set forth at respondent's Exhibit No. 9-E. This class of property is a necessary adjunct of active equipment and it is appropriate that it be considered a part of the cost of that equipment rather than as a part of the property classified as materials and supplies. We find that the direct cost of Account Nos. 530–533 and the total direct cost of the entire property as shown at Commission Exhibit No. 4 should be increased in the amount of $420,150.

Account 404—Miscellaneous Physical Property.

[6] The third important item of difference applies to Account 404—Miscellaneous Physical Property. Respondent included no estimate in Exhibit 34 for this account, while Taylor included the sum of $662,511. In view of the fact that this amount applies to buildings not used or useful in rendering public service by respondent, it will be excluded from our computation in the determination of the original cost of the used and useful property.

As the result of the elimination of the item of $662,511 from the Taylor estimate, we will also exclude $34,495, which represents Taylor's estimate of the indirect costs applicable thereto.

Total indirect costs allowed by us amount to $10,570,000, which results from the subtraction of $34,495 from the Taylor estimate of $10,604,697.

We will adopt the Taylor estimates for all of the remaining accounts. These estimates in the aggregate are somewhat higher than the Ehlers estimates for the same accounts; however, the net difference is small.

Our allowances for each account are set forth in Appendix A and show that the aggregate allowances total $104,194,000, as of December 31, 1941. We will adopt this sum as the original cost of respondent's property used and useful in the public service, before provision for materials and supplies, cash working capital, or cost of financing.

B. Reproduction Cost

[7–9] Respondent submitted three estimates of the reproduction cost of net useful property. Two of these,

dated June 30, 1941, and December 31, 1941, were determined by using as the starting point a previous reproduction cost estimate dated October 1, 1937. The amounts shown therein have been brought to June 30, 1941, and December 31, 1941, "by suitable recognition of the deductions and additions of property during the interval, changes in construction cost levels, and of changed circumstances affecting the present use and the prospective usefulness of the property." The 1937 reproduction cost estimate, in turn, was based on an inventory and reproduction cost estimate dated in 1919, which was brought up to 1937 by giving effect to changes in price levels, retirement of property in the 1919 estimate and the installation of new property. Those two estimates, therefore, may be considered as trended estimates dating back to a basic inventory and cost estimate as of 1919, an interval of twenty-three years. Since Exhibit 16-A supersedes Exhibit 16, it being identical in all respects except that it is dated December 31, 1941, six months after Exhibit 16, our further comments with respect to the trended estimates will relate solely to Exhibit 16-A. The third estimate is dated December 31, 1941, but differs from the other two by reason of the fact that it was based on the application of unit prices independently determined, to the units of property included in the inventory. All three reproduction cost estimates were based on prices at or about December 31, 1940. This price level basis was selected "in order to avoid the unstable price and delivery conditions caused by defense and war activities during 1941, and in general is slightly lower than levels prevailing during the latter months of 1941 or the early months of 1942."

The two estimates at December 31, 1941, as shown by Exhibits 16-A and 16-B, are summarized as follows:

[Table omitted shows Trended Estimate 16-A: direct costs, $155,676,000 and indirect costs, $30,979,000, totaling $186,655,000, or a ratio of indirect costs to direct costs of 19.9 per cent. Independently Priced Estimate 16-B shows: direct costs, $151,912,000, and indirect costs, $25,262,000, totaling $177,174,000, or a ratio of indirect costs to direct costs of 16.6 per cent.]

No reproduction cost estimates were submitted by other interested parties.

Our consideration of reproduction cost will be limited to the independently priced estimates as reflected by Exhibit 16-B. While there may be occasions when a trended reproduction cost estimate has some value as a rough indication of property replacement cost by furnishing an outside limit, there can be no serious question that an inventory, independently priced, on the basis of wholesale construction, is, by comparison, more reliable. The trended estimate 16-A was necessarily partly based on piecemeal construction and did not take into account the advantages of wholesale construction carried out by modern methods and by the use of modern equipment, as contemplated in a reproduction cost estimate. In this instance the trended estimate exceeds by $9,481,000 the independently priced estimate, which is to be expected in the light of past experience. Accordingly, we will disregard entirely the trended estimate and consider only the independently priced exhibit, which

amounted to $177,174,000 as of December 31, 1941. No amounts are included in this total for working capital or intangibles.

A reproduction cost estimate is a vague and indefinite indication of current property costs and all such estimates are subject to the same infirmities. Justice Stone (now Chief Justice) in his dissenting opinion in West v. Chesapeake & P. Teleph. Co. (1935) 295 US 662, 689, 79 L ed 1640, 8 PUR(NS) 433, 449, 55 S Ct 894, said:

"In assuming the task of determining judicially the present fair replacement value of the vast properties of public utilities, courts have been projected into the most speculative undertaking imposed upon them in the entire history of English jurisprudence. . . . Public utility properties are not thus created full-fledged at a single stroke. If it were to be presently rebuilt in its entirety, in all probability it would not be constructed in its present form. When we arrive at a theoretical value based upon such uncertain and fugitive data we gain at best only an illusory certainty."

The reproduction cost estimates in this case are likewise based on "uncertain and fugitive data."

Respondent's property is of a type that would not be reproduced as it now exists. Respondent has been undergoing a gradual conversion from street railway to motor bus and trackless trolley operations, and the program of conversion has not been completed; the conversion program involves the abandonment of trackage, which in the next seven years will amount to approximately 82 miles, out of a total of about 500; the old type cars are being replaced by the new type PCC cars, 150 having been acquired in the last two years and 110 are in the process of delivery; some car barns and shops would conceivably be placed at other than their present locations; and there would be more likelihood of the construction of a subway west of Twenty-fourth street on Market street in place of the present elevated line, in the event of a reproduction of the property. Yet the reproduction cost estimate here under consideration contemplates the reproduction of all of the present trackage, cars, and other property, at their present locations and in their present form.

In the order nisi issued at A. 33559 in the reorganization proceedings, we said "It has been admitted that the Philadelphia street railway system would not be reproduced today in toto if the opportunity should present itself." (*Supra,* 26 PUR(NS) at p. 78.) Of course it would not.

Included in the reproduction cost of $177,174,000 is $15,013,000 for paving. The $15,013,000 comprising this account is based upon the original and actual cost of several million square yards of paving, for which only $3,151,000 has been allowed in our original cost estimate, for the reasons stated previously. If reproduced today the cost would be many millions in excess of that amount. On the other hand, if the paving item is treated as a franchise cost as presently considered by respondent, then it would require a vivid imagination to assume that $15,000,000 would be exacted by the municipalities as a cost of franchise in addition to a paving tax now being imposed and amounting currently to about $650,000 annually. We will al-

low in reproduction cost the sum of $3,151,000 for the paving item.

Included among the indirect costs is $11,591,000 for interest during construction. This estimate is based on a theoretical construction period totaling four to five years, an assumption as to the rate of flow of money required during construction and an annual interest rate of 6 per cent. The final result is equal to 7 per cent on the direct costs plus all other estimated indirect costs. A review of the maze of assumptions used in coming to the determination of interest during construction in respondent's estimate is enlightening.

First, the direct costs, while included in the reproduction cost estimate as such, are not wholly reproduction cost estimates at all. One outstanding example is rights of way, another is land, and still another is paving, or franchises, or whatever else it may be called subsequently by respondent. Certainly these, and possibly other exceptions, prevent the use of the term reproduction cost as applied to the estimated direct costs. Out of a total of $151,912,000, more than $21,000,000, or 14 per cent, is based on original cost for the three items mentioned. All of the remainder is presumably based on reproduction cost. In determining prices to be related to the property, it is necessary to make many estimates and assumptions. It is necessary to assume labor rates and labor performance, or efficiency. Much of the inventoried property is of a type which has not been manufactured for some years, and resort must be had to prices of different property. Transportation and hauling costs must be estimated, based on assumptions as to delivery points for materials and the type of hauling equipment used. Installation costs must be estimated based on an assumption that certain types of installation apparatus, as distinct from other types, would be used. This all leads to total direct cost figures, which in the final analysis are based on assumption pyramided over assumption until in the end the result is a super assumption. After determining direct costs in this fashion, estimated indirect costs are determined, each of which is largely based on assumption. In this case, Exhibit 16-B merely states that "To the total of the foregoing direct costs, developed as hereinbefore set forth, we have added suitable allowance to provide for the indirect or overhead construction costs that we believe would be experienced by the company, if the reproduction of its property as it existed as of December 31, 1941, were undertaken under the prevailing conditions and at the construction cost levels as of December 31, 1940." For the various indirect items no details of precise determination are given and, in fact, the estimated amounts are not even assumptions, unless we refer to arbitrary percentages added, such as 1 per cent for preliminary and organization expenses, or 3 per cent for administrative and legal expense as assumptions. Respondent's witness, Warren E. Sanborn, manager of the Investigation and Reports Department of Day and Zimmermann, Inc., who testified with respect to reproduction cost, said these percentages were based on his judgment. Accordingly, we now have a combination of assumptions and so-called judgment, which has produced a base figure of $165,583,000 to which

was applied the rate of 7 per cent for interest during construction. We have already indicated how the 7 per cent rate was determined. It was based on several assumptions and the arbitrary use of an interest rate of 6 per cent annually. Sanborn did not qualify as an expert on the cost of money and the use of this rate is open to serious question, when consideration is given to the present low level of interest rates on various types of investments. In view of the foregoing, it is evident that the 7 per cent rate applied by Sanborn is subject, not only to the weakness inherent in its determination, but is also subject to the numerous weaknesses in the base of $165,583,000 to which it was applied.

For the purpose of this order, we will adopt the reproduction cost of $177,174,000, adjusted only to exclude paving of $11,862,000 plus 19.9 per cent for indirect costs applicable thereto, a total of $14,223,000, leaving $162,951,000 for the adjusted reproduction cost new, exclusive of working capital and intangibles. We consider this adjusted determination to be, at best, only an "illustory certainty." However, in our fair value determination we will give it such weight as appears proper in the light of quality, or lack of it, of reproduction cost estimates generally and of this one in particular.

C. Accrued Depreciation

[10–13] Respondent presented two estimates of accrued depreciation, through Henry E. Ehlers, vice president of Day and Zimmermann, Inc. The first was related to the original cost of respondent's property, as reflected by respondent's Exhibit 15; the second was related to respondent's estimate of the reproduction cost of the property, as reflected by respondent's Exhibit 16-B. The approach to the depreciation study made by Ehlers and the application of results thereof to each of the cost estimates was presented by Ehlers in respondent's Exhibit 34.

For the Commission, Taylor made an estimate of accrued depreciation as related to his estimate of the original cost of the property as of December 31, 1941, and the results thereof are included in Commission Exhibit 4.

The Ehlers' estimates are based on observation and study of the property. The Taylor estimate was based on the estimated life and age of the property as developed in the reorganization proceedings in 1937, which, in turn, were based on observation and study. Taylor used the original cost estimate as of 1937 and brought it up to December 31, 1941, by including property added between 1937 and 1941 and by subtracting property retired during the same period. However, he accepted the lives and ages assigned to the various property items in the 1937 study.

We will first take up the approach used by Ehlers and the effect of that approach upon his determination of accrued depreciation.

Exhibit 34, for which Ehlers takes full responsibility, relates the general concepts and approach used in the preparation of his depreciation estimates. A definition of depreciation is shown by the exhibit, as follows:

"Depreciation, from the value standpoint is a reflection of the present condition of a property item, its usefulness and position in the system of

which it is a part, and its prospective usefulness therein. Consideration from this angle covers not only the effect of physical causes of deterioration, but also the impact of changes in the art, public requirements, obsolescence, inadequacy, supersession, etc., nonphysical causes hereinafter spoken of collectively as obsolescence."

Upon cross-examination by counsel for the city of Philadelphia, Ehlers also stated that he agreed with the definition of depreciation adopted by the National Association of Railroad and Utility Commissioners in 1936, said definition being as follows:

"Depreciation as applied to depreciable utility plant means the loss in service value not restored by current maintenance incurred in connection with the prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities."

It will be noted that virtually every cause of depreciation is included in both of the foregoing definitions, including physical causes.

In making his determination of estimated accrued depreciation, Ehlers gave predominant weight to the so-called nonphysical causes such as impact of changes in the art, public requirements, obsolescence, inadequacy, supersession, etc., which he collectively refers to as obsolescence. For example, out of a total $16,311,000 of surface tracks, excluding the tracks located in barns and shops, Ehlers gave no consideration to physical causes of depreciation for track having an original cost of $13,720,000. This was done upon the basis that renewals and maintenance currently take care of the track system as a whole and that as long as tracks are currently and adequately renewed and maintained there is no existing depreciation due to physical causes. Furthermore, inasmuch as Ehlers could not foresee any nonphysical causes, there was no depreciation estimated therefor.

With respect to the question of physical causes, such as wear and tear, decay, and action of the elements, Ehlers' position appears untenable. During the course of his cross-examination Ehlers admitted on several occasions that time and wear exert their toll on a track system, that component parts will pass out and be replaced, that specific portions of the track system, for example, Chestnut street track, will wear out, and that age "has a bearing, as I see it, upon its probable physical condition just from the point of view of age."

In Exhibit 34, the track of respondent is classified according to various grades of quality. This classification is as follows: [Table omitted.]

As shown above, 48.3 miles of tangent track, or 10 per cent of the total trackage, is rated as excellent. Ehlers defines excellent track as follows:

"Track classified as excellent in which the line grade and joints were highly satisfactory and were flanged; and head of the rail wear was in evidence only to a minor degree or not at all; no sharp edges and the cross section of the rail materially the same as one that came from the mill. In

some instances the outer edges of the rail had not been touched by the tread of the wheel. Good track, as distinguished from the excellent, that a greater amount of wear had occurred on the head and flanges of the rail than that falling in the excellent category. The line graded joints had to be good before a section of the track could be so classed; likewise there must have been no evidence of the flange in the wheel having worn or ridden upon the bottom of the groove of the rail. The outer edge of the rail had developed a definite sharpness, and in some instances, slight flange wear was in evidence."

Without giving the definition for each of the grades shown above, we quote below the Ehlers' definition of fair track, of which there was 154.9 miles, comprising 32.4 per cent of the total mileage:

"Track classified as fair; surface may be satisfactory and the joints were up; the head of the rail was flat and well worn; the bottom of the groove showed some evidence of flange wearing and inner edge of the rail at the gauge line was rounded due to flange wear, while the outer edge was sharp."

From the grade of excellent to the grade of fair, as indicated by the two definitions just quoted, it will be seen that whereas there is very little evidence of wear and tear in the track graded as excellent, there is considerable wear and tear in the track rated as fair. Considering all of the grades together it is quite evident that, notwithstanding the contentions of Ehlers that no depreciation exists in the track system for which he estimates an original cost of $13,720,000, there is a substantial amount of depreciation in the track itself from physical causes. Accordingly, he has failed to take into account one of the important elements of depreciation included in both definitions to which he subscribes.

Summarizing Ehlers' depreciation determinations with respect to track, we reproduce below a table included in respondent's Exhibit 34: [Table omitted.]

The first item above shows an estimated accrued depreciation of $2,060,000 on 82 miles of track which respondent plans to abandon. According to respondent's modernization plan of 1940, it was intended to abandon, over a 9-year period beginning in 1940, about 133 miles of track. About 23 miles represented abandonments which have already been accomplished. Further studies of the 1940 plan have been made in the light of subsequent developments and Ehlers now concludes that 82 miles is a fair figure to use for purposes of estimating the accrued depreciation due to abandonment. The accrued depreciation at December 31, 1941, is estimated at 80 per cent of the original cost of $2,575,000 and is attributed solely to the factors collectively referred to as obsolescence.

The second item of accrued depreciation on track, relating to the D. M. & C. (Chester Short Line), is on the basis of 100 per cent of the original cost of $16,000 for the outer section of the line, and is entirely due to obsolescence caused by its imminent abandonment.

Factors considered in relation to the estimated accrued depreciation for barn and shop trackage are not clearly indicated. Ehlers said:

"When we did this job three or four years ago, we made quite a study of what had happened to the car barn and shop trackage in the past, and as a result of that, well, we worked out some sort of an indication of what might happen to it in the future, and this figure is a reflection of that work."

With respect to the estimated accrued depreciation of $30,000 adopted for rapid transit tracks, Ehlers said: ". . . That is a nominal allowance, and I have no way of gauging it numerically." Ehlers further said that the life cycle on rapid transit tracks would be less than on surface tracks.

Finally, Ehlers estimated additional accrued depreciation for trackage as a whole, based on deferred renewals, amounting to $495,000.

The total estimated accrued depreciation of $2,721,000 might be said to be based entirely on obsolescence factors, except for the physical causes which were recognized in the item of deferred renewals.

Results of the application of Ehlers' concept of accrued depreciation as related to track may be illustrated by a hypothetical case which may conceivably be factual. Assume a mile of track constructed ten years ago which has outlived its period of usefulness today and will be replaced tomorrow, then in that instance this concept recognizes no accrued depreciation today but will consider the track 100 per cent depreciated tomorrow.

The varying results which are obtained in determining accrued depreciation by the concepts and methods set forth in respondent's Exhibit 34 are exemplified by two reports, both prepared by Day and Zimmermann, Inc., and presented as exhibits. One of these reports was a reproduction cost estimate of respondent's property as existing at January 1, 1935, and presented as applicant's Exhibit 21 in the reorganization proceeding. The other is a reproduction cost estimate of respondent's property at December 31, 1941, and presented as Exhibit No. 16-B in the instant proceeding. In the consideration of these two exhibits, we take notice of the testimony of Ehlers, at page 1405, as follows: [Testimony omitted.]

Reference to the estimates of January 1, 1935, at Account No. 530-533, shows that despite this testimony the reproduction cost new for passenger equipment was estimated by the company to be $36,436,500 and the reproduction cost new less accrued depreciation to be $26,442,300 while, as of December 31, 1941, respondent's exhibit shows reproduction cost new of passenger equipment to be $40,625,000 and reproduction cost new less accrued depreciation to be $20,999,000. Ehlers, however, did not reconcile this point with testimony that similar property which as of December 31, 1941, would have cost some $4,000,000 more than it would have cost several years ago has a value of some $5,000,000 less than at the previous date. In the earlier estimate the ratio of accrued depreciation to reproduction cost is 27.4 per cent and in the more recent estimate this ratio is 48.3 per cent.

In comparing track accounts in the two estimates a reversal of these conditions appears, although in lesser amounts. In the earlier report the ratio of accrued depreciation to reproduction cost is 15.9 per cent and in the

latter and more recent report—14.7 per cent.

Considering the total direct and indirect costs in the two estimates, we note that the entire property has an estimated reproduction cost of about $6,000,000 more and a depreciated cost of over $4,000,000 less than similarly estimated at the prior date.

Depreciation has been defined as a "lessening of worth with age." In more detail it may be or has been defined as the reduction of service capacity by age, use, wear and tear, action of the elements, obsolescence, inefficiency, inadequacy and demands of public interest and of public authority. It follows, therefore, that accrued depreciation at a given time is the result of cumulative action of these forces.

It is this concept of depreciation and of accrued depreciation with which we are here concerned, rather than with any formula resulting from mathematics of finance or from managerial policies, which acts to set up a financial reserve, sinking fund, or other device designed to amortize the capital invested in property consumed by the action of depreciatory forces. After thorough consideration of the subject of accrued depreciation as presented by the respondent, we are of the opinion that the methods used and the results obtained by respondent are not reliable for the determination of accrued depreciation.

Other depreciation estimates were made by Ehlers and are reflected by respondent's Exhibit 15. In our opinion, they are even less reliable than those in Exhibit 34, being based upon the application of ratios developed by relating the book reserve to the property accounts, and applying such ratios to the original cost and reproduction cost estimates. The book reserve has not been established as being representative of the accrued depreciation of the property; furthermore, it never has been in agreement with any independent depreciation estimate of record in the reorganization case or in this case.

For the purpose required in the instant proceeding, the age-life straight-line method of determining accrued depreciation reflects the element of value resting in the physical property of such an enterprise. It is the more direct and practical, productive of more consistent results and conforms to the concept previously expressed, and we shall adopt this method in our determination.

Having accepted in principle the age-life straight-line method of depreciation it remains only to explore the degree of accuracy of the method as applied to the property here considered.

We recognize that accrued depreciation at a given instant is not susceptible of precise determination by any method of appraisal for the reason that depreciation of a unit or a group of units of property is subject to periodic variations during its life. However, since the straight-line method assumes that all such variations are, so to speak, ironed out to make depreciation uniform throughout the life, it follows that accuracy of results rests on the proper determination of the factor of life expectancy. Age of existing property, the other principal factor, is usually determinable with accuracy.

In the instant proceedings conditions are particularly favorable for the determination of life expectancy. The electric street railway industry in

metropolitan Philadelphia as now comprised in Philadelphia Transportation Company has, in effect, been practically an entity for a period of forty years and substantially so for a period of fifty years.

Changes through the years resulting in present conditions have been progressive and evolutionary and at no time excessively abrupt. In these circumstances, the statistical records of the company are a sound basis for estimating life expectancy particularly for those classes of property which have been replaced one or more times during the historical period, and which now comprise at least 60 per cent of respondent's property extant. In the compilation of Commission Exhibit 4 by the engineering staff, the straight-line method of determining accrued depreciation was used. This is shown clearly by the exhibit and by the testimony of Taylor in his citations from testimony concerning prior estimates which were used at the primary base in the preparation of this exhibit. It was further testified that Commission engineers in preparing Commission Exhibit 4 made full use of company records and only in infrequent instances was it necessary to go beyond those records for pertinent data.

In reviewing Commission Exhibit 4 and the related testimony of Taylor, we take note of certain points which would appear to require modification of the accrued depreciation estimate made on the straight-line basis used. Taylor testified that the estimated lives adopted for the various items of property were taken from the exhibits submitted in evidence in the reorganization case and that no subsequent inspections of the property were made in connection with the preparation of Commission Exhibit 4. In the earlier estimate Commission Engineer Roberts adopted some lives, for rolling stock and other equipment particularly, which, in his opinion, were on the point of retirement and therefore were considered to have completed their respective useful service lives. Because of a variety of conditions which developed during the period intervening between the dates of the two exhibits, including war defense activities, which in turn required greater utilization of all equipment, some of such property is in use today. However, certain of the rolling stock was in dead storage for a period and based on conditions prevailing prior to the present war emergency, would probably have been retired as contemplated by Roberts. On the other hand, some of the rolling stock and equipment has been in continuous use since the Roberts' estimate and to that extent subsequent experience did not confirm the estimated lives used by him. It follows, therefore, that some of the lives in Exhibit 4 are in need of revision, consummation of which would alter the depreciation results. However, Taylor's ages and estimated lives with relation to trackage, an important property item, are confined by respondent's engineer, Ehlers.

The annual depreciation calculated by the straight-line method and shown in this exhibit is $3,096,384 and the actual charge to depreciation and renewals for the year 1941 shown by respondent's Exhibit No. 1-A is $3,080,138. While the close agreement of these two amounts may be a mere coincidence, nevertheless the compari-

son as an indication of accuracy is not without merit.

In our determination of fair value, appropriate consideration will be given to our criticisms of the depreciation method adopted and application thereof to the cost estimates.

D. *Book Cost and Depreciation Reserve*

At December 31, 1941, the book cost of respondent's property amounted to $111,724,346.99. This amount purports to represent, with certain exceptions, "the original cost of the property items in the various classifications, based upon and in accord with the findings of the Commission as set forth in its order of October 3, 1938, Application Docket No. 33559 (26 PUR(NS) 65), and modified by detailed adjustments for property retired or added between October 1, 1937 and December 31, 1941." The major exceptions relate to the land and paving accounts. These accounts were recorded in accordance with the Philadelphia Rapid Transit Company's petition of November 17, 1938, asking for "reconsideration of the order of October 3, 1938, and for approval of the Second Revised Plan of Reorganization, dated December 1, 1937, as amended June 1, 1938, and November 15, 1938, which approval was granted by order of November 22, 1938 (26 PUR(NS) 154)."

We have pointed out previously herein that final approval of the plan of reorganization as expressed in the order of November 22, 1938, *supra,* did not embrace approval of any figures therein relating to property costs, depreciation, etc. Since respondent's intention in opening its books was to record original costs, we are of the opinion that such costs should have been recorded in accordance with the specific findings made by the Commission as to all property accounts in the order nisi of August 2, 1938, 26 PUR (NS) 65, and as modified in the order of October 3, 1938, *supra.* Adjustment of the recorded figures should result in a book cost approximating the finding herein made of $104,242,000 in relation to original cost. Accordingly, we will adopt this figure as the adjusted book cost of respondent's used and useful property.

The recorded reserve for depreciation of road and equipment amounted to $26,570,409.49 on December 31, 1941. The reserve was created January 1, 1940, upon the following basis:

"The figures shown for accrued depreciation on the books of this company and its wholly owned subsidiaries with the exception of Willow Grove Park Co. represent an estimate by Day & Zimmermann, Inc., the company's consulting engineers, of the reserve requirements for accrued depreciation applicable to the original costs shown on the books of this company and its wholly owned subsidiaries. The amount is based upon the results of their studies of the system made prior to and during the recent reorganization proceedings, upon the use of methods fully set forth in the exhibits and notes of testimony and summarized in the briefs filed by the company in those proceedings, and upon a study of the probable development of the system in the light of the more recent plans for its modernization. *These estimated requirements for depreciation are in general accord with*

the suggestions of the company in its petition for reconsideration and approval of the plan as amended, which approval was granted by the Pennsylvania Public Utility Commission by its order of November 22, 1938 (26 PUR(NS) 154)." (Italics supplied.)

On the basis of all evidence in the reorganization proceedings, the Commission in the order of October 3, 1938, *supra,* found that $31,000,000 would be reasonable for accrued depreciation. In the petition for reconsideration the company suggested $27,500,000, a difference of $3,500,000.

Here again is a situation where respondent, by booking the reserve amount suggested in the petition, attempts to bind the Commission to its acceptance, merely because of its inclusion therein. While even the figure of $31,000,000 is not binding on us in this or any other proceeding involving respondent, we are of the opinion that the reserve at December 31, 1941, should be increased to the extent of $3,500,000 in order to restore the status contemplated by the order of October 3, 1938. Accordingly, we will add this amount to the figure of $26,570,409.49, thus producing an adjusted reserve figure of $30,070,409.49.

In determining fair value we will consider as an element thereof the adjusted book cost of property amounting to $104,194,000 from which we will deduct $30,070,000 for the adjusted depreciation reserve, leaving $74,124,000 as the book cost less depreciation reserve.

E. Securities Outstanding and Corporate Surplus

[14–16] The capitalization and surplus of respondent at December 31, 1941, were as follows:

Funded Debt, including $3,887,000 of Equipment Trust Bonds		$62,434,848.00
Participating Preferred Stock—754,731 shares—par value $20 each		15,094,620.00
Common Stock—719,926 shares—stated value—$10 each		7,199,260.00
Total Securities Outstanding		$84,728,728.00
Surplus:		
Capital Surplus	$3,715,783.66	
Profit and Loss Account	839,846.12	4,555,629.78
Total Securities and Surplus		$89,284,357.78

In addition, respondent shows that equipment trust obligations aggregating $2,000,000 were to be issued early in 1942, to finance the purchase of new equipment. We thus have for consideration total capitalization and surplus of $91,284,358.

To date this year respondent has issued equipment obligations dated April 1, 1942, in the amount of $1,386,000. These were issued to finance the purchase of 110 PCC cars and 10 trackless trolleys at an estimated cost of $2,058,000. Respondent has ordered new busses at an estimated cost of $1,200,000, and the remaining portion of the $2,000,000 of obligations included above is to be issued to finance their purchase. We will include, therefore, the entire $2,000,000 in the securities outstanding.

Respondent's capital surplus at December 31, 1941, amounted to $3,715,783.66, as shown above. This was created by recording the original cost of the property and depreciation

reserve at January 1, 1940, at amounts exceeding specific findings made in our order dated October 3, 1938, in the reorganization proceedings. We are of the opinion that the item of capital surplus should not be recognized as a part of respondent's securities outstanding and surplus, inasmuch as adoption by respondent, for accounting purposes, of the findings referred to would not have made possible the creation of a capital surplus.

In accordance with the foregoing, we find that the par and stated values of the securities outstanding and book surplus, aggregating $91,284,358, should be reduced by $3,715,784 to $87,568,574.

Respondent's Exhibit 25, submitted by Coffman, shows the market prices of nearly all issues of respondent's outstanding bonds, as of December 31, 1941. We have applied these prices to the principal amounts, using, however, the par values for bonds not priced, and have developed market values on that date, as follows:

	Principal Amount	Market Value
Real estate mortgage bonds and miscellaneous	$2,095,344	$2,140,554
Divisional lien bonds	20,522,300	20,761,068
Collateral trust bonds	1,784,000	1,852,258
First and refunding mortgage, series A, 1969	1,865,260	1,678,734
Consolidated 3%–6%, series A, due January 1, 2039	32,280,944	16,463,281
Equipment trusts	3,887,000	3,887,000
Totals	$62,434,848	$46,782,895

Addition of the equipment trust bonds to be issued in 1942, at par would increase the market value of the bonds to $48,782,895.

Coffman testified on cross-examination that the preferred stock of respondent had a market value of $4 per share and the common stock had a market value of $1 per share. Addition of the total market values of the two capital stock issues to the total market value of the bonds, produces a total market value for all securities of $52,521,745, as shown below:

Market value of bonds	$48,782,895
Market value of participating preferred stock—754,731 shares @ $4	3,018,924
Market value of common stock—719,926 shares @ $1	719,926
Total Market Value—December 31 1941, including equipment trust bonds to be issued in 1942	$52,521,745

We will give consideration to the par or stated values of securities outstanding, and to their market values, in our fair value determination.

F. *Working Capital*

[17] Respondent claims an allowance of $1,500,000 for materials and supplies and $2,700,000 for cash working capital, a total of $4,200,000. We will allow the former, which is almost identical with the amount shown by the books at December 31, 1941. The claim of $2,700,000 for cash working capital is shown by Exhibit 15, and is a judgment determination by respondent's witness Ehlers after consideration of several methods of approach.

The primary purpose for making an allowance for working capital is to include in the rate base sufficient cash to permit the enterprise to provide for its necessary expenditures until such time as revenues are received from its patrons. In the instance of a transportation utility, service is rendered on a cash prepayment basis. Accordingly, if the enterprise were being initiated with its present business available, at

the close of the first day of business one day's revenue would be in hand in cash. And so with each succeeding day a corresponding amount of cash would flow to the enterprise. Accordingly, there appears to be no need for an allowance for cash for the expenses of operation, exclusive of taxes and depreciation, in the amount claimed by Ehlers.

However, respondent's Exhibit 15 at page 9 indicates a number of items which are claimed to require cash. In giving consideration to a minimum bank balance of $1,200,000, we are not impressed that such a requirement would obtain at the day of inception of the enterprise. Giving consideration to all of the exhibit with respect to the subject of working capital, it is our opinion that an allowance of $1,000,000 for cash is reasonable and we so find.

In view of the foregoing we will allow $1,500,000 for materials and supplies and $1,000,000 for cash working capital, a total of $2,500,000.

G. *Cost of Financing*

[18] In the order of October 3, 1938, relative to the reorganization case, the Commission allowed $2,800,000, being equivalent to approximately 4 per cent of the determined original cost depreciated. While this allowance appears unduly liberal for rate-making purposes in view of financing costs currently being incurred by other large utilities, it appears reasonable to adopt the figure of $2,800,000 in relation to both reproduction cost and original cost. Accordingly, in our determination of fair value, this amount will be given appropriate consideration.

H. *Investment in Additional Equipment during* 1942

[19] Respondent's Exhibit 13 shows an estimated increase in the road and equipment account during 1942 amounting to $3,325,093, made up as follows:

110 PCC trolley cars	$1,981,000
10 Trackless trolley cars	135,000
100 Forty-passenger single deck busses	1,200,000
1 Thirty-one passenger single deck bus	9,093
Total additions	$3,325,093

The record shows that the foregoing equipment has been ordered and partial deliveries made. We will give consideration to the cost thereof in our fair value determination.

I. *Fair Value*

In accordance with the principles of rate determination as expressed in the opinion of the Supreme Court of the United States in Smyth v. Ames (1898) 169 US 466, 42 L ed 819, 18 S Ct 418, and by the appellate courts of Pennsylvania, otherwise known as the fair value rule, we will now consider the various elements of cost and value evidence of record in this case and reach a determination of the fair value of respondent's used and useful property.

Our determination of the original cost of respondent's property amounts to $104,194,000, as of December 31, 1941, before deducting accrued depreciation. The depreciated original cost, after giving effect to the principles of depreciation adopted by us, is as follows:

Original cost undepreciated	$104,194,000
Accrued depreciation	47,000,000
Original cost less accrued depreciation	$57,194,000

The original cost undepreciated figure of $104,194,000 is our determination as shown by Appendix A [herein omitted]. The accrued depreciation is based on the estimate made by Taylor adjusted for depreciation on items added to and deducted from the original cost estimate.

Our determination of the reproduction cost of respondent's property amounts to $162,951,000, as of December 31, 1941, before deducting accrued depreciation. The depreciated reproduction cost, after giving effect to the depreciation method adopted herein, is as follows:

Reproduction cost new	$162,951,000
Accrued depreciation—using overall ratio of accrued depreciation to original cost	73,300,000
Reproduction cost new less depreciation	$89,651,000

The foregoing original cost and reproduction cost determinations do not include provision for working capital, purchase of new equipment in 1942, or intangibles. To each of the above depreciated cost figures should be added the findings made previously herein for these items, as follows:

	Original Cost Depreciated
Original cost depreciated	$57,194,000
Add:	
Working capital	2,500,000
Cost of financing	2,800,000
Cost of new equipment to be purchased in 1942	3,325,000
Total	$65,819,000

	Reproduction Cost Depreciated
Reproduction cost depreciated	$89,651,000
Add:	
Working capital	2,500,000
Cost of financing	2,800,000
Cost of new equipment to be purchased in 1942	3,325,000
Total	$98,276,000

Another element of fair value is the adjusted book cost less depreciation reserve amounting to $74,124,000, plus the items of working capital, cost of financing, and cost of new equipment, or a total of $82,749,000.

Finally, we have as an element of fair value, respondent's outstanding securities and surplus, which we have found to amount to $87,568,574 for rate-making purposes. The market values of these securities, determined in the manner previously indicated amount to $52,521,745. Both figures include $2,000,000 of equipment trust obligations to be issued in 1942.

All of the elements enumerated above and our finding with respect to each are summarized as follows:

Original cost depreciated	$65,819,000
Reproduction cost depreciated	98,276,000
Book cost less depreciation reserve, as adjusted	82,749,000
Bonds, stock and surplus:	
At par and stated values	87,569,000
At market values	52,522,000

In view of recent decisions of the Supreme Court of the United States, particularly In Federal Power Commission v. Natural Gas Pipeline Co. of America (1942) 315 US 575, 86 L ed —, 42 PUR(NS) 129, 150, 62 S Ct 736, it is questionable whether any weight should be given to reproduction cost in making a rate base determination. The concurring opinions of Justices Black, Douglas, and Murphy, include the following statement:

"As we read the opinion of the court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or of giving any weight to that element of 'fair value.' The Commission may now adopt, if it chooses, prudent investment as a rate base—the base long advo-

cated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in the Southwestern Bell Telephone Case (262 US 276, 67 L ed 981, PUR1923C 193, 43 S Ct 544, 31 ALR 807) there could be no constitutional objection if the Commission adhered to that formula and rejected all others."

Based upon consideration of each of the elements included in this section of the order, and having weighed all other facts of record which might be considered as relevant thereto, we find and determine that the fair value of respondent's used and useful property, as a going concern based on evidence as of December 31, 1941, is $77,000,000, including working capital and cost of financing; including also the estimated cost of equipment to be purchased in 1942.

II. *Rate of Return*

[20–23] Respondent claims an allowance of 7 per cent for rate of return. This claim is based primarily on opinion evidence given by Edward Hopkinson, Jr., chairman of the executive committee and a director of respondent. Hopkinson was reorganization manager of the reorganization of Philadelphia Rapid Transit Company and underliers, being appointed by the Federal court for that purpose. He was responsible for the plan of reorganization and stated in the instant proceeding that "in my judgment" it was a fair plan.

Mr. Charles E. Ebert, executive vice president of respondent, testified that one of the exhibits offered in the reorganization proceedings showed that during the 5-year period 1934 to 1938 the average amount available for interest and dividends was $5,800,000 and that the amount would be sufficient to pay all of the interest on the bonds issued under the reorganization, $1 per share dividend on preferred stock, $1 per share dividend on the common stock, and would allow approximately $1,000,000 to be added to surplus. The order nisi of August 2, 1938, 26 PUR(NS) 65, in the reorganization proceeding said that "on the basis of Mr. Ebert's testimony reasonable expectation of income available for distribution to proposed new securities is approximately $4,000,000." It is evident, therefore, that while the average earnings in the 5-year period ended December 31, 1938, approximated $5,800,000, Mr. Ebert expected that based on the years 1937 and 1938, when the earnings were $4,126,562 and $3,752,508, respectively, the earnings after the organization of the new corporation would more nearly approach the figures for the most recent experience then available, or would be in the neighborhood of $4,000,000. These earnings should be considered in conjunction with Hopkinson's statement that in his judgment the plan of reorganization was fair.

Another witness called by respondent was Mr. Paul B. Coffman, vice president of Standard & Poor's Corporation, a financial statistical investment service of New York. Coffman made a purported analysis of the Philadelphia transportation situation, a detailed study of the cost of money in various categories, such as commercial paper, bonds, preferred stock, etc., and in addition reached a conclusion that the amount required by respondent to preserve the investment quality of the debt outstanding is $6,892,845 annu-

ally. Coffman presented an elaborate exhibit containing numerous charts and tables, among which was Chart No. 5, showing the outstanding capital of respondent as of December 31, 1941. The total outstanding debt is shown at $62,434,848, of which $46,294,376 is considered to be fixed interest debt and $16,140,472 is considered to be contingent interest debt. The preferred stock is shown at $15,094,620, and the common stock and surplus combined is shown at $11,754,890. The segregation between fixed interest debt and contingent interest debt was based on the fact that respondent has outstanding, as a result of the reorganization, $32,280,944 of consolidated mortgage 3 per cent–6 per cent series A bonds, due in 2039. The issue provides that the fixed interest rate shall be 3 per cent but that 6 per cent shall be paid if earned. Although respondent was incorporated on January 1, 1940, these bonds bore interest from January 1, 1939. Respondent paid 5.6 per cent on these consolidated mortgage bonds for 1939, but has paid the full 6 per cent interest, including 3 per cent fixed and 3 per cent contingent, for the years 1940 and 1941. In view of this situation with respect to the interest provisions, Coffman divided the consolidated mortgage bonds into fixed interest bearing debt and contingent interest bearing debt, as stated.

Upon presentation of Exhibit 25, counsel for respondent stated that Coffman's testimony would be almost identical to the type of testimony he gave in the Pennsylvania Power and Light Company Case before this Commission. In the instant case, Coffman stated that what he was "principally interested in in this study was the matter of preservation of investment quality of debt outstanding." His conclusion was based on the establishment of an investment rating of B1 plus according to Standard & Poor's. However, referring to Appendix Table 4 of Exhibit 25, where twenty-four issues of funded debt are listed, it is noted that only one of the issues, namely, the Market Street Elevated Passenger Railway Company first mortgage 4 per cent bonds due in 1955, in the amount of $10,000,000, was rated as high as B1 plus. One issue was rated as low as C, which rating is defined in Appendix Table 2 of Exhibit 25 as follows: "This rating is reserved for income bonds on which no interest is being paid and for the best defaulted issues." The consolidated 3 per cent–6 per cent bonds, already referred to, which amounted to $32,280,944, are rated C1, which rating is described in Appendix Table 2 as follows: Bonds rated C1 plus and C1 are outright speculations, with the lower rating denoting the more speculative. Interest is paid, although in the case of C1 ratings the bonds may be on an income basis and the payment may be small." It is evident, therefore, that Coffman did not follow his intention to preserve the investment quality of the debt outstanding but improved it considerably to a B1 plus rating which he defines as follows in Appendix Table No. 2: "The B1 plus, or medium grade, category is borderline between definitely sound obligations and those wherein the speculative element begins to predominate. These bonds have adequate asset protection and normally are covered by satisfactory earnings. Their susceptibility to

changing conditions, particularly to lengthy depressions, necessitates constant watching. Marketwise, the bonds are as responsive to business conditions as they are to interest rates. The group is the lowest which qualifies for commercial bank investment." It is further evident that if Coffman were to reach a conclusion based on preservation of the actual ratings, the interest requirements would be considerably less than the $6,892,845, which he testified was necessary for that purpose.

With respect to Coffman's statement that his testimony is almost identical to the type he gave in the Pennsylvania Power and Light Case, we point out that in the latter case he accepted Standard & Poor's investment ratings for the funded debt issues of the Pennsylvania Power and Light Company, whereas in the instant case he improved the ratings so that all of the funded debt issues would be on the basis of B1 plus.

If respondent were allowed to earn for its interest and dividend capital charges the sum of $6,892,845, there would be available for preferred stock dividends 8½ per cent on the par value thereof and 20 per cent on the stated value of the common stock. Based on the market values of the preferred and comon stock there would be available therefor, as testified to by Coffman on cross-examination, 62½ per cent on the preferred stock and 200 per cent on the common stock. There is an interesting contrast between Coffman's testimony in this case, where he fixes 20 per cent as a proper return on the stated value of the common stock, and the testimony he gave before a board of viewers in a case involving condemnation of the Market street bridge in Harrisburg. In the latter case, where it was to the utility's interest to use a low percentage as a basis for capitalizing earnings to arrive at a high capital value, Coffman considered 7 per cent as proper earnings, and 5½ per cent as proper dividends, on common stock.

On redirect examination Coffman attempted to show that the remaining portion of the $6,892,845 that would be available for dividends after provision for all interest requirements, would be reduced substantially by requirements of respondent to make payments on its Serial Equipment Trust obligations and by the payment of sinking-fund charges on various issues of funded debt outstanding. This was an obvious attempt to show that the amounts available for dividends would more closely approach the figures in the Harrisburg bridge situation and was made in disregard of the fact that payment of debt of any sort whatever is merely an equal exchange of liabilities for assets and does not in any way affect earnings or stock equities. Stockholders, particularly common stockholders, may benefit in one of two ways from the earnings of corporations. First, if sufficient cash is available, all of the earnings may be paid in dividends; secondly, if sufficient cash is not available, or if certain requirements for the liquidation of debt or sinking-fund payments must be met, some cash is utilized therefor and instead of receiving benefits immediately in the form of cash dividends, the stockholder receives benefits arising from an increase in the value of the stock which he holds. Coffman admitted that a sink-

ing-fund payment is an allocation of income and not a charge to expense.

Coffman submitted a number of charts and statements relating to the operations of Philadelphia Rapid Transit Company and Philadelphia Transportation Company for the period from January 1, 1931, to December 31, 1941. A study of these data in conjunction with other evidence in the case shows that Coffman has failed to make adequate adjustment for unusual book entries, to the extent that certain charges and credits were not related to the years to which they applied. We will not enumerate all of the items but will point out a reduction in the tax liability at January 1, 1940, in the amount of approximately $3,100,000 due to overaccruals for taxes in previous years by Philadelphia Rapid Transit Company. Appropriate adjustment of this item to reduce the taxes shown by Coffman's exhibit for the years for which the accruals were set up would substantially increase the earnings in some of the years affected, with corresponding changes in the ratios developed by him. Another item relates to the annual payment of $240,000 to the city of Philadelphia during the years 1933 to 1941, inclusive. During the period from 1933 to 1938, inclusive, this annual charge was not shown in operating expenses, but for the years 1939 to 1941, inclusive, the annual charge was included in operating expenses by Coffman. Appropriate adjustment to reflect operating results for all years on a consistent basis would further change the ratios developed by Coffman. Still another item relates to charges included on the books and by Coffman in 1938 and prior years as deductions from income, whereas the amounts relating to similar items were included in expenses for the years 1939 to 1941, inclusive. Further changes would be necessary in the ratios in each year should the tables and charts be set up on a comparable basis. In addition to these specific items, there were made, from time to time, entries in the surplus account of Philadelphia Rapid Transit Company and Philadelphia Transportation Company reflecting adjustments of income charges or credits in previous years. No attempt was made by Coffman to restate the accounts in each year to determine the proper earnings. In fact, Coffman disregarded these entries entirely and gave them no consideration in his study. We consider the failure of Coffman to submit the operating statements of Philadelphia Rapid Transit Company and Philadelphia Transportation Company on a comparable basis has resulted in misleading statements of earnings and the development of misleading ratios. Since he relied somewhat upon these data in reaching his conclusion of the earnings required to cover fixed debt capital, it is apparent that his conclusion is incorrect to the extent that failure to make these adjustments has resulted in incorrect statements of earnings for the various years.

Coffman's approach in this case is based entirely upon acceptance of the capital structure of respondent and the determination of the earnings required to support such a capital structure. It has been the law since Smyth v. Ames, *supra*, that the determination of reasonable rates for public utilities shall be based on a fair return on the fair value of used and useful property.

To make such a determination numerous factors must be taken into consideration, including the reproduction cost of property, the original cost thereof, accrued depreciation thereon, market value of bonds and stock, invested capital, and any other matter which may be pertinent in the particular case. Coffman accepts one of the elements as to value and adopts it as the only one which should be given weight. Such an approach is obviously wrong and the adoption by this or any other regulatory body or court having jurisdiction would result in blind acceptance of capital structures, whether such structures are supported by full value, partial value or no value. Regulation would be nullified by this procedure, and any "water" existing in the capital structure would be preserved for all time, and ratepayers would be required to pay a rate thereon in perpetuity.

We are of the opinion that Coffman's testimony should be disregarded or at least severely discounted, and we will give little or no weight to his conclusions in our determination of a fair rate of return for respondent.

In Driscoll v. Edison Light & P. Co. (1939) 307 US 104, 119, 83 L ed 1134, 28 PUR(NS) 65, 74, 59 S Ct 715, the Supreme Court of the United States made the following statement with respect to determination of a reasonable rate of return:

"The rate of return was fixed by the Commission at 6 per cent. Witnesses for the utility brought out facts deemed applicable in the determination of a proper rate of return on the fair value of the property. Their evidence took cognizance of the yield of bonds, preferred and common stocks of selected comparable utilities, the stagnant market for new issues, prevailing cost of money, the implications of the possible substitution of some governmentally operated or financed utilities for those privately owned and the dangers of a fixed schedule of rates in the face of possible inflation. From these factors they deduced that a proper rate of return would be from 7.8 per cent to 8 per cent. An accounting expert of the Commission countered with tables showing yields of bonds of utilities; the yield to maturity of Pennsylvania public utility securities, approved by the Commission between July 1, 1933, and May 7, 1937, long term and actually sold for cash to nonaffiliated interests; yield of Pennsylvania electric utilities; financial and operating statistics of Pennsylvania electric utilities; money rates, and other material information. He concluded 5.5 per cent was a reasonable rate of return.

"It must be recognized that each utility presents an individual problem.[24] The answer does not lie alone in average yields of seemingly comparable securities or even in deductions drawn from recent sales of issues authorized by this same Commission. Yields of preferred and common stocks are to be considered, as well as those of the funded debt. When bonds and preferred stocks of well-seasoned com-

[24] "United R. & Electric Co. v. West, 280 US 234, 249, 74 L ed 390, PUR1930A 225, 50 S Ct 123; Willcox v. Consolidated Gas Co. (1909) 212 US 19, 48, 53 L ed 382, 29 S Ct 192, 48 LRA(NS) 1134, 15 Ann Cas 1034; Bluefield Water Works & Improv. Co. v. West Virginia Pub. Service Commission, 262 US 679, 692, 67 L ed 1176, PUR1923D 11, 43 S Ct 675; Knoxville v. Knoxville Water Co. (1909) 212 US 1, 17, 53 L ed 371, 29 S Ct 148."

panies can be floated at low rates, the allowance of an over-all rate return of a modest percentage will bring handsome yields to the common stock. Certainly the yields of the equity issues effect of substantially reducing charges on capital securities. In the following table we summarize from Exhibit 25 the interest rates on certain types of securities, commercial paper, etc.

	Jan. 1930	Jan. 1937	Jan. 1942
60–90-day time loans	4.70%	1.25%	1.25%
4–6 months commercial paper	4.85	.75	.58
Call loans—renewals	4.64	1.00	1.00
Bank Rates to Customers:			
New York city	5.43	1.75	1.88*
7 other northern and eastern cities	5.72	2.93	2.45*
Rediscount rates:			
New York city	4.5	1.5	1.00
Philadelphia	5.0	2.0	1.5
U. S. Government bonds:			
Long term	3.42	2.41	2.03
Intermediate	3.90	1.87	1.56
Municipal bonds	4.22	2.79	2.33
Bond yields—Highest grade:			
Composite	4.88	3.22	2.85
Public utilities	4.99	3.22	2.72
	Jan. 1937	Jan. 1940	Jan. 1942
Bond yields—Corporate quality ratings:			
A1 plus	3.13	2.93	2.85
B1 plus	4.42	4.63	4.06
Bond yields—Public utility quality ratings:			
A1 plus	3.04	2.76	2.72
B1 plus	4.52	4.31	3.42

*December, 1941

must be larger than that for the underlying securities. In this instance, the utility operates in a stable community accustomed to the use of electricity and close to the capital markets, with funds readily available for secure investment. Long operation and adequate records make forecasts of net operating revenues fairly certain. Under such circumstances a 6 per cent return after all allowable charges cannot be confiscatory."

While Coffman's exhibit is deficient in many respects, it does include voluminous data with respect to the cost of money as related to various types of securities, over a period of years. These studies show that from 1930 to 1942 the cost of money has been declining constantly and that corporation financing in recent years has had the

Data relating to yields on preferred stocks, as shown by Coffman's exhibit, show that the trend has been downward from 1937 to 1941. In fact, all the statistical data with reference to the trend of the cost of money show that such cost was lower in 1941, regardless of the type of security, than it was for many previous years.

In expressing his opinion that a minimum of 7 per cent should be allowed respondent under present-day conditions, Hopkinson apparently gave some consideration to the situation in which street railway companies generally have found themselves during recent years. It is common knowledge, of course, that numerous street railway companies have undergone bankruptcy and reorganization in order that the capital demands would not

require too great a portion of revenues collected from ratepayers. This is the situation in which the Philadelphia Rapid Transit Company found itself in 1934 when bankruptcy and reorganization proceedings were begun in Federal Court. In addition to this factor, Hopkinson appears to have given consideration to most of the other factors generally relied upon by regulatory Commissions and courts having jurisdiction, in making judgment determinations of reasonable rates of return, although the record does not indicate the extent to which each factor was considered.

We do not believe that any distress situation with respect to any particular type of utility or any particular utility within a type should be given any weight in reaching a proper rate of return. Particularizing as to the Philadelphia Rapid Transit Company the record shows that for a number of years extending into the 1920's the company was highly prosperous and was able to meet all of its obligations, whether of an operating or a financial nature and at the same time render adequate service. This was true even to the extent that the company was much more than able to meet the rental payments to the underlying companies from which much of the property was leased.

The reorganization, which resulted in the formation of Philadelphia Transportation Company followed a certain definite pattern; provision was made for the elimination of all of the underlying companies and consequent elimination of the requirement for huge rentals; the earnings of the Philadelphia Rapid Transit Company in the years immediately preceding the reorganization were considered, particularly in relation to the amount that would be available to meet capital charges on securities of the new corporation, namely, Philadelphia Transportation Company. Upon the consummation of the reorganization respondent took over the mass transportation system in the city of Philadelphia with the full expectation that the earnings to be derived would be sufficient to meet the requirements of the newly created capital structure. Upon this point the following is quoted from the testimony: [Testimony omitted.]

At the time of reorganization, respondent, being relieved of burdensome charges previously required of the Philadelphia Rapid Transit Company, still had many of the problems of the former Company in that it had to contend with competition from other forms of transportation, particularly private automobiles. Despite this competition, however, the earnings improved and while in 1939 the interest on the consolidated mortgage bonds was not fully earned and therefore not paid, the earnings in 1940 and 1941 permitted payment in full. This was largely due to the war defense effort which caused sharp increases in business production and activity in the Philadelphia area as well as elsewhere. With the entrance of the United States into a state of war and resultant curtailment in the production of automotive equipment and tire and gasoline rationing, street railway utilities entered into a new phase which resulted almost immediately in very substantial increases in passengers carried and operating revenues. We need only review the operating statement submitted for the record by respondent for the

first six months of 1942 to show that such changes in conditions have been of tremendous benefit to respondent. The revenues in these six months were $4,211,187 in excess of the revenues for the first six months of 1941, a gain of 22.8 per cent. These increased revenues are partially offset by increased labor costs, increased material costs, and other items of operating expenses, but there is no indication at present that the increased expenses will be sufficient to offset increased revenues for some time to come. The increased business becomes more striking as the operating results for the latest months of 1942 become available, as is indicated by the Statement for the month of June, when the operating revenues were $1,066,888 in excess of the revenues in the month of June, 1941, an increase of 33.3 per cent, and, in fact, were $19,922 in excess of revenues in the month of May, 1942. This latter comparison is illuminating by virtue of the fact that, based on past experience, the month of June is the first of the so-called "slack months" due to seasonal recession in business.

Based upon a consideration of present-day economic conditions, the nature of respondent's business, local conditions, competition, interest rates, and all other matters that may have an influence upon respondent's operations, we conclude that a rate of 6 per cent on the fair value of respondent's property is proper and reasonable.

III. *Revenues, Expenses, Taxes, Rentals, and Annual Depreciation Operating Expenses, Exclusive of Taxes and Depreciation*

[24] Respondent's Exhibit 8B reflects operating expenses by months, totaled by years, for the period from January 1, 1940, to June 30, 1942. During the progress of the hearings additional information was requested by the Commission's staff and furnished by respondent so that we have for consideration the operating experience of respondent during its entire period of existence in such detail as was required for intelligent analysis.

Before discussing specific operating expense items, we deem it appropriate to make note of the rapidly increasing trend of operating expenses due to the unusual circumstances existing during the 2½-year period, particularly in 1941 and to date in 1942. Under ordinary circumstances we would base our allowances largely upon experience over a period of years, particularly with respect to maintenance costs, but in view of the fact that the rapidly changing conditions result in changes in operating costs from month to month and from year to year, thereby resulting in new levels as time goes on, we will give controlling weight to the actual experience in the twelve months ended June 30, 1942, and will consider the experience in previous periods only to the extent that it appears necessary in making proper allowances for the future. However, during the hearings it developed, and the record shows, that certain items charged to expense are nonrecurring in character, or are questionable as proper charges to operating expenses to be assumed by the ratepayer. These items will be separately considered in ensuing paragraphs.

The record includes an exhibit, which is respondent's budget for 1942.

This budget was submitted to the executive committee of the board of directors on March 5, 1942, and according to the testimony of respondent's controller, A. A. MacDonald, was in process of preparation for some time. The operating results for only a few weeks of 1942 were available when the final work in the preparation of the budget was begun. In some cases, a budget has furnished a valuable guide in making determinations of reasonable operating expenses, considered in conjunction with prior experience, but in view of conditions existing in 1942 as related to respondent, it was found that the budget estimates are greatly at variance, in some important respects, with the actual experience for the first six months of 1942. Accordingly, we will give little or no weight to the budget forecast for 1942 in making determinations of reasonable operating expenses.

The total operating expenses, exclusive of taxes and annual depreciation, as shown by the books and by the exhibits in this case, before adjustment for nonrecurring or questionable items, were as follows for the periods indicated:

Year ended December, 31, 1940 ..	$23,099,850
Year ended December 31, 1941 ..	25,480,277
12 months ended June 30, 1942 ..	28,277,955

Contributions and Donations

[25] In 1940 and 1941 respondent made contributions and donations for charitable purposes in the amounts of $23,781 and $26,262, respectively. MacDonald states that it is anticipated that such payments will be made in 1942 to approximately the same extent as for the year 1941. Payments for contributions should be disallowed, as to allow them as operating expenses would be equivalent to giving our approval to their payment as contributions and donations by the ratepayers rather than by respondent itself. In our opinion these items of expense should be absorbed by the stockholders and not by the ratepayers. This view is supported by the opinion of the Pennsylvania superior court in the Solar Electric Company Case (1939) 137 Pa Super Ct 325, 31 PUR(NS) 275, 9 A(2d) 447. Accordingly, we will make no provision in allowable operating expenses for contributions and donations.

Rate Case Expenses

[26] Respondent submitted an exhibit showing that the total rate case expenses to May 31, 1942, amounted to $253,889. This includes the $118,247 charged to operating expenses during 1941, plus an additional $135,642 expended during the five months ended May 31, 1942, and charged on the books to Unadjusted Debits.

The total of $253,889 expended to May 31, 1942, is made up as follows: [Table omitted.]

In view of the fact that the proposed rates are substantially greater than the just, fair, and reasonable rates respondent is entitled to charge, as will hereafter appear, we see "no reason why the public should be asked to bear the expenses of the litigation brought on by (respondent) filing a schedule of rates found to have been greatly excessive." Scranton-Spring Brook Water Service Co. v. Public Service Commission (1935) 119 Pa Super Ct 117, 144, 14 PUR(NS) 73, 90, 181 Atl 77. Therefore, respondent's rate case expenses are not allowable.

Increase in Expenses Recorded in 1941 Due to Change in Inventory Method

[27] In 1941 respondent changed its method of charging materials and supplies used in operation to operating expenses. Prior to 1941 it was customary to take out of materials and supplies inventory required materials on a "first in—first out" basis. That is to say, when materials and supplies were so required, the price applicable to the oldest of the materials and supplies in stock was used as a basis for making the charge to operating expense. In 1941 the method was changed to price the materials out on the "last in—first out" basis. This meant that 1941 operation were burdened with highest cost materials, while the lower cost materials were permitted to rest in the inventory account and were prevented from having any effect upon the income statement. To the best of our knowledge, the method adopted by respondent in the year the rate case was begun, is not utilized by any other public utility. Due to the change of method operating expenses in 1941 were approximately $42,000 greater than would be the case if the previous method had been continued in use. It is our opinion that charges to operating expenses should not be influenced by such changes in accounting methods, and we will accordingly disallow the item as a proper operating expense.

Note of PRT Coöperative Association

[28] In 1941 respondent made a charge to Account 87, Relief Department Expense, in the amount of $193,200. This charge is explained by Exhibit 11, as follows:

"Amortization a/c Payment of Coöperative Association Note. Philadelphia Transportation Company has petitioned the Public Utility Commission for approval of the acquisition of 22,000 shares of the preferred stock and 28,400 shares of the common stock of Transit Investment Corporation as a result of paying off a demand note due by the PRT Coöperative Association to Mid-City Bank & Trust Company (formerly Mitten Bank & Trust Company) in amount of $195,000 pursuant to the employer-employee contract made between the company and the PRT Employees Union for the year 1941."

In the wage negotiation between respondent and the employees' union in 1941, respondent agreed to take over a note of $195,000 due the Mid-City Bank and Trust Company (formerly Mitten Bank and Trust Company) by the PRT Coöperative Association. Since payment of the total amount of $195,000 involves the acquisition of capital stock of another corporation, respondent has come before this Commission at A. 60071 for approval of the acquisition under the provisions of § 202(f) of the Public Utility Law.

PRT Coöperative Association is a nonincorporated association of employees of Philadelphia Transportation Company and owes a balance of $195,000 on a bank loan which it obtained some years ago. This loan is secured by a pledge of 22,000 shares of preferred stock and 28,400 shares of common stock of Transit Investment Corporation, which owns the Mitten building and the Mitten bank building, both in Philadelphia, and certain shares of Philadelphia Transportation Company stock. Transit In-

vestment Corporation is now in receivership. The application has not yet been disposed of by the Commission.

Payment of the loan is considered by respondent to be necessary for the relief of the financial condition of the Coöperative Association, so that the association may administer pensions and other employee benefits. It is averred by respondent in the application case that the lender, Mid-City Bank and Trust Company, can institute collection proceedings, not only against the association, but also against the individual members thereof, and that payment of the loan by respondent will promote good will between it and the employees.

Whether the charge against operating expenses in 1941 in the amount of $193,200 (the remaining $1,800 having been charged to investment securities account) should be included in operating expenses to be paid by the ratepayer, is another matter. In the first place, the charge is of a nonrecurring character and will not be repeated in the future; secondly, the charge results from a chain of circumstances that began many years ago and in no sense can be considered to be a normal operating charge; thirdly, the loan was incurred by the Coöperative Association prior to the existence of respondent and the assumption of the obligation by respondent should result in its absorption by a direct charge to the surplus account; and finally, even though the loan were to be liquidated by respondent as part consideration for the settlement of a wage dispute, the charge cannot in any sense be considered as a normal labor cost. For these reasons, we will make no allowance for this item in our determination of proper operating expenses.

Public Utility Commission—General Assessment

The operating expenses for 1940 include in account 89, Miscellaneous General Expenses, a charge of $90,568, by virtue of general assessments made by the Commission. This is made up of an estimate of $52,500 applicable to the year 1940, the remaining $38,068 being applicable to the period prior to 1940. For 1941, respondent made a charge of $50,000 and the accrual for 1942 thus far is on the basis of an annual charge of $50,000. Our allowance of operating expenses will be on the basis of $50,000 annually.

Wage Increases

Before concluding on the question of allowable operating expenses, it should be noted that two wage increases became effective during the year ended June 30, 1942, the first approximating an increase in the rate per hour of 6 cents at an annual cost of $1,500,000, the second being an increase of 2 cents per hour at a total cost of $500,000 annually. It is evident, therefore, that the operating expenses for the twelve months ended June 30, 1942, do not include therein the increase effective August 1, 1941, for the month of July, 1941, and that they include only half of the increase granted, effective January 1, 1942. Out of a total estimated increase in labor costs by virtue of these increases of $2,000,000 annually, approximately $1,625,000 is included in the operating expenses for the twelve months ended June 20, 1942, and approxi-

mately $375,000 additional would be included if the wage increases had been in effect for the full twelve months' period ended June 30, 1942. In making a determination of allowable operating expenses we will include $375,000 to give effect to the present wage level.

Operating Expenses—Conclusion

In accordance with the foregoing and giving due consideration to experience in 1940, 1941 and particularly in the twelve months ended June 30, 1942, we find that reasonable operating expenses for respondent chargeable to the ratepayer in each of these years and in the determination of reasonable future rates, are as follows: [Table omitted.]

The operating expenses allowed for 1940 and 1941 and for the twelve months ended June 30, 1942, as shown by the above table, are reconciled with the amounts charged on the books in the following statement:

	Year Ended December 31 1940	1941	Twelve Months Ended June 30, 1942
Total operating expenses exclusive of annual depreciation—unadjusted	$23,099,850.07	$25,480,277.15	$28,277,955.41
Deduct disallowed items:			
Contributions and donations—other than employees—Account 89	23,780.67	26,262.45	26,000.00
Public Utility Commission general assessment for prior periods—Account 89	38,067.99		
Note of PRT Coöperative Association—Account 87		193,200.00	95,700.00
Increase in recorded expenses due to change in inventory method—various accounts		42,000.00	42,000.00
Rate case expenses:			
Account 63—Superintendence of Transportation		678.40	678.40
80—Advertising		10,053.45	10,053.45
86—Law		10,000.00	10,000.00
89—Engineering		70,183.44	70,183.44
Printing tariff notices		1,280.50	1,280.50
94—Stationery and Printing		25,351.35	25,351.35
Postage		700.00	700.00
Amortization of rate case expenses			90,000.00
Total Deductions	$61,848.66	$379,709.59	$371,947.14
Total operating expenses, exclusive of annual depreciation—adjusted	$23,038,001.41	$25,100,567.56	$27,906,008.27

Taxes

The charges for respondent's tax liability for the years 1940 and 1941 and the twelve months ended June 30, 1942, are reflected by Exhibit 8-D. The total charges in 1940 amounted to $2,567,622.92, in 1941, they amounted to $3,030,282.76, and for the twelve months ended June 30, 1942, they amounted to $4,128,-230.14.

As an introduction to our discussion of particular tax items we wish to point out that in each of the three periods mentioned respondent has made accruals for taxes in excess of the actual tax liability and that other tax charges are of the type not considered to be allowable in making determinations of reasonable rates. Each of the questioned items will be

separately discussed; however, we will submit at this point the following table, which shows a reconciliation between the total amounts charged on the books for each period and the amounts allowed by us.

	Year Ended December 31 1940	1941	Twelve Months Ended June 30, 1942
Total tax charges on books	$2,567,622.92	$3,030,282.76	$4,128,230.14
Deduct disallowed items:			
Federal Income Tax	$39,598.26	$274,000.00	$1,003,793.29
State Income Tax	8,889.67	42,000.00	77,446.89
Federal Normal Income Tax on bond interest	16,000.00	17,000.00	17,000.00
Federal Old-Age Benefits Tax			214,680.07
State Corporate Loans Tax	260,000.00	260,000.00	260,000.00
State Capital Stock Tax	26,909.96	39,487.12	35,430.41
Sinking Fund Payment to City of Philadelphia	240,000.00	240,000.00	240,000.00
Real Estate taxes on property not used or useful	* 89,455.00	89,455.00	** 86,000.00
Total deductions	$680,852.89	$961,942.12	$1,934,350.66
Taxes allowed	$1,886,770.03	$2,068,340.64	$2,193,879.48

* Based on amount shown for 1941 in Exhibit 1-B, Supplement.
** Based on amount shown for twelve months ended May 31, 1942 in Exhibit 1-B, Supplement.

Each of the items disallowed, as shown above, will be treated separately in ensuing paragraphs.

[29, 30] With respect to Federal and state income taxes, there are two reasons why no income tax charges should be allowed for 1940 and 1941, and one reason why no tax should be allowed and one reason why the book accrual should be reduced, for the twelve months ended June 30, 1942. In the first place, respondent has made accruals for these two kinds of taxes on its books, although income tax returns filed for 1940 and 1941 show that, rather than reporting income subject to tax, large losses were reported. Under the provisions of the Federal Tax Laws, losses may be carried over for a period of not more than two years in subsequent tax returns. In the Federal income tax return for 1940 respondent reported a loss of $3,077,666.75, nearly all of which was carried over into the 1941 return and claimed as a deduction therein. This resulted in respondent reporting a loss in 1941 for Federal Income Tax purposes of $2,957,647.08. According to MacDonald's testimony it is likely that the loss to be carried forward into the 1942 tax return will be sufficient to offset entirely the taxable net income otherwise determined, for the year. Accordingly, respondent would not be required to pay any income tax for 1942.

The second reason for eliminating income taxes for the period covered is that tax accruals were made on the books on the basis of the book net income and not upon the basis of income reported in the tax returns. There are numerous differences between the books and the tax returns as to income and income deductions, the most important of which is the amount at which depreciation was charged on the books below the amount of depreciation deducted from income in the tax returns. The

depreciation difference in 1940 amounted to approximately $961,000, in 1941 it amounted to approximately $400,000, and in 1942 it will amount to approximately $800,000. Application of the tax rates prevailing in 1940 to the difference of $961,000 would result in an amount which would be much more than sufficient to offset the income tax accruals made; application of the prevailing rate for 1941 to the difference in depreciation for 1941 would almost offset the tax accrual made, and application of the rate of 47 per cent for Federal Income Tax and 7 per cent for State Income Tax, a composite of 48.9 per cent, which rates were used by respondent, to the difference in depreciation for the twelve months ended June 30, 1942, would result in a reduction in the recorded income tax liability, in the amount of $391,200.

MacDonald stated repeatedly that if respondent's contention with respect to the 1940 taxes and the resultant loss of $3,077,666.75 is sustained, by the Federal taxing authorities, there would be no taxes assessable for any of the periods herein considered. He also said, in answer to a question as to why charges were made for 1940 when no taxes would be paid therefore, that:

"When I said no such tax was payable, I perhaps should have amplified that to say no such tax was payable on the basis of the returns which we have filed, but that return has not yet been settled; there have been a number of controversies, but it is *my personal feeling that we will sustain them;* if we don't we may have to pay some taxes, not necessarily the amount that we accrued, it might be smaller, I can't say—I can't conceive that it would be larger; but we have allowed the accrual to remain in there as representing the conservative position of the company." (Italics supplied.)

Since the basis for assessment of state income taxes is the income tax returns filed for Federal income tax purposes, it is apparent that should no Federal income taxes be paid there will be no requirement to pay state income taxes.

We are of the opinion that no allowance should be made for Federal or state income taxes for 1940, 1941, or the twelve months ended June 30, 1942, in view of the tax situation just described. However, in view of the fact that the statutory period for carrying forward losses for previous years ends for respondent in 1942, we will make an allowance for Federal and state income taxes, in determining reasonable future rates, at the tax rates used by respondent in 1942, applied to taxable income based on revenues determined to be allowable in this order.

We have also disallowed $260,000 in each of the periods for State Corporate Loans taxes. This is in accordance with the opinion of the Pennsylvania superior court in the Bangor Water Case (1923) 82 Pa Super Ct 48.

The accruals for Federal Normal Tax on Bond Interest, which amounted to $16,000 in 1940, $17,000 in 1941, and $17,000 for the twelve months ended June 30, 1942, are disallowed for the reason for which the State Corporate Loans Tax was disallowed. Both taxes are in the same category from a rate-making standpoint, being a function of interest

cost. Accordingly, Federal normal tax on bond interest is also an item that should be paid out of the allowed return.

Respondent has accrued on its books and charged to its tax account $102,000 in each period for state-capital stock tax. Since the formation of respondent on January 1, 1940, no settlements have been made by the Pennsylvania Department of Revenue with respect to this tax. According to the testimony of MacDonald, the revenue department has preliminarily assessed a tax of $68,000 for the year 1940, whereas respondent has admitted and paid a tax amounting to approximately $17,000. The amount of tax finally assessable against respondent for any of the periods cannot be determined by us. However, in view of the results of negotiations thus far between respondent and the department of revenue, we believe that a fair and proper allowance for capital stock tax is $65,000 and we have accordingly deducted from the accrual in each of the years 1940 and 1941 and for the twelve months ended June 30, 1942, the difference between the book accruals and the amount allowed.

Under the provisions of an agreement entered into on July 1, 1907, between the city of Philadelphia and the Philadelphia Rapid Transit Company, said agreement being amended on December 20, 1932, and again on June 12, 1939, respondent is required to make payments to the city of Philadelphia, which in 1940, 1941, and the twelve months ended June 30, 1942, amounted to $240,000 annually. The purpose of these payments to the city, which began July 1, 1912, is to afford the city funds with which to purchase the property of respondent. The agreement of 1907 and the two amendments referred to are of record in this case as City Exhibit No. 5. The agreement is interpreted by respondent's controller, MacDonald, to mean that "the original purpose of that payment was that it should be put into a sinking fund and there retained until such fund reached, I think, $5,000,000; at which time the city could elect to take it over and use it for its general purposes, or it could elect to retain it as against the time it might wish to purchase the property of Philadelphia Rapid Transit Company." Paragraph 11, which refers to the right of the city to purchase all the property, leaseholds, and franchises of the company, is quoted as follows:

"*Eleventh.* The city reserves the right to purchase all the property, leaseholds, and franchises of the company and its wholly owned subsidiaries upon any first day of July hereafter, by serving six months' notice on the company of its intention so to do and upon paying to the company upon the date named in said notice, an amount equal to the sum of the face amount, or call price if any, and accrued interest of all then outstanding bonds of, and all then outstanding prior lien bonds, mortgages and ground rents on the property of, company and its wholly owned subsidiaries, plus the par value of all then outstanding preferred stock of company, and an amount equal to $10 per share for all then outstanding common stock of company, and the amount of the then undistributed corporate surplus, if any, of company. The city's aforesaid right to purchase

shall cover the entire transportation system and property, leaseholds and franchises of the company and its wholly owned subsidiaries, as a whole, at the time the city exercises said right to purchase and said option to purchase is in lieu of all existing options which the city now has in any form, whether applicable to the whole system or parts thereof or interest therein: *Provided, however,* That the city reserves to itself whatever right to condemn it now has or shall hereafter have under any present or future legislation giving the city the right to condemn. This contract shall continue in force until such right is exercised, but whenever the right is exercised the city shall succeed to and become the owner of all the franchises, leaseholds (including all leaseholds from the city to the company), rights, property, and privileges theretofore vested in the company and its wholly owned subsidiaries and the city may either operate the same or lease the right to operate the same for such terms and upon such conditions as it may deem fit. The right of the city to purchase under this paragraph shall be assignable and may be put up at public auction to the highest bidder therefor. The company reserves its franchise to be a corporation with the power to operate passenger transportation systems and may become a bidder for such right.*

In view of the circumstances surrounding these payments, we are of the opinion that the annual charge of $240,000 in each period should be disallowed.** This was the action taken by the Public Service Commission in the case involving Philadelphia Rapid Transit Company at A. 11417–24, PUR1926B 385. To allow these items would require the ratepayers to compensate the company for a return on the value of the property, annual depreciation thereon, and a sum represented by these payments to the city with which the city can purchase the property of the company according to the option allowed so to do in the 1907 agreement, as amended. Obviously, these duplicate charges to the ratepayer are not proper.

During the years 1940, 1941, and the twelve months ended June 30, 1942, the existing tax rate for Federal Old Age Benefits Tax was 1 per cent and accruals were made by charges to the tax account on this basis. However, in the first six months of 1942, an additional accrual of 2 per cent was made. Accordingly, in the six months ended June 30, 1942, the total accrual was equivalent to 3 per cent. There is no indication at this time that the tax rate will be higher than the 1 per cent currently in effect and we will disallow the charges amounting to $214,680.07, resulting from accruals for the extra 2 per cent.

[31] Charges to taxes included accruals or payments to the city of Philadelphia and miscellaneous boroughs and townships for real estate taxes. These charges were as follows for the periods indicated:

*As amended by agreement of June 12, 1939, which also provides as follows: 'Wherever, in said contract of July 1, 1907, the city's right of purchase of the property and interest of the company is referred to, it shall hereafter mean the right of purchase as set forth in said paragraph eleventh as hereby amended.' "

** For final ruling on this issue see post, p. 309.

	1940	1941	Twelve Months Ended June 30, 1942
City of Philadelphia	$225,972.60	$210,261.21	$211,917.21
Miscellaneous boroughs and townships	22,170.54	21,756.20	22,614.24
Totals	$248,143.14	$232,017.41	$234,531.45

Exhibit 1-B, Supplement, shows that the portion of these taxes applicable to property not used or useful amounted to $89,455.35 in 1941, and $86,054.27 for the twelve months ended May 31, 1942. Since property not used or useful is not included in the fair value upon which respondent is entitled to a return, it is evident that the taxes applicable thereto must be disallowed.

On the basis of the foregoing, we find and determine that proper charges to ratepayers for taxes in 1940, 1941, the twelve months ended June 30, 1942, and for the future in the determination of reasonable rates, are as follows:

Annual Depreciation

Respondent made charges to the several depreciation accounts, in the periods indicated, as follows: [Table omitted.]

For the equipment accounts, the charges were based largely on age-life straight-line calculations. With respect to the track account, however, the charges depended principally on the track renewals made. This was accomplished by crediting the appropriate fixed capital accounts with the cost of track included therein, which was retired and renewed, the cost of the renewals being charged to fixed capital. The concurrent charges for track

	Year Ended December 31 1940	1941	Twelve Months Ended June 30, 1942	Allowed
State and Federal				
State income	..	..	..	$58,000
State capital stock	$65,000	$65,000	$65,000	65,000
State unemployment insurance	441,092	487,996	540,785	550,900 (a)
State auto licenses	99,145	130,977	142,985	143,000
State gasoline and fuel oil	168,002	191,178	213,008	213,000
Federal income	..	..	..	767,000
Federal capital stock	8,278	43,325	37,947	38,000
Federal old age pensions	163,282	180,488	200,320	204,000 (c)
Federal unemployment insurance	49,010	54,232	60,022	61,100 (b)
Federal gasoline—Oil	58,119	79,582	88,192	88,200
Federal excise tax on tires	6,363	11,585	9,401	9,400
Federal automobile use tax	..	..	1,689	1,700
Total State and Federal	$1,058,291	$1,244,363	$1,359,349	$2,199,300
City of Philadelphia				
Paving	$651,978	$652,028	$652,042	$652,000
Bus licenses	17,813	21,875	25,975	26,000
Parking lots	..	7,512	7,982	8,000
Real estate taxes (d)	158,688	142,562	148,531	149,000
Total City of Philadelphia	$828,479	$823,977	$834,530	$835,000
Total Taxes	$1,886,770	$2,068,340	$2,193,879	$3,034,300

(a) Includes 2.7% on $375,000—$10,125.
(b) Includes .3% on $375,000—$1,125.
(c) Includes 1% on $375,000—$3,750.
(d) Includes payments to miscellaneous boroughs and townships.

credited to fixed capital were to Account 25—Depreciation of Way and Structures. Thus, charges made in the books, in the aggregate, were based on two general methods of determination.

The Commission, through Taylor, submitted an estimate of annual depreciation amounting to $3,096,384, based on the age-life straight-line method as applied to the original cost of the property. However, this estimate includes a provision relating to Account 404 Miscellaneous Physical Property—Buildings, which should be excluded, but does not provide for depreciation on spare parts added by us to Account 530-33—Passenger Cars, or for annual depreciation on equipment to be added in 1942.

In our opinion, an allowance of $3,200,000 for annual depreciation would be reasonable. This is a judgment determination derived primarily from Taylor's evidence. Taylor's estimate is based on cost, which is the basis also sponsored by Ehlers, for respondent, who said:

"I would base my allowance for annual depreciation, regardless of how I got it, upon the asset side of the balance sheet, and I think that would be book cost. I think the depreciation per se ought to be based upon cost of the property not upon reproduction, if that is the purpose of the question."

Conclusion

On the basis of the findings made herein, it would appear that respondent is entitled to charge rates designed to yield operating revenues of $41,674,000, computed as follows:

6% Return on fair value of $77,000,000	$4,620,000
Operating expenses	28,281,100
Rentals	2,538,600
Taxes	3,034,300
Annual depreciation	3,200,000
Allowable operating revenues	$41,674,000

Respondent's operating revenues amounted to $41,936,800 from the present rates in the twelve months ended June 30, 1942, within $262,800, or 6/10 of 1 per cent of the allowed revenues. Respondent's forecast for 1942 contemplates operating revenues of $43,341,900 from the present rates, or $1,667,900 in excess of the allowed revenues. However, experience for the first five months of 1942 shows that the forecast has been exceeded to the extent of $768,400, or 4.3 per cent. Furthermore, the revenues in the seven months ended July 31, 1942, exceeded the revenues in the first seven months of 1941 to the extent of $5,357,100, or almost 25 per cent.

When Rail and Bus Tariffs No. 3 were filed, respondent estimated increased operating revenues from the suspended rates, amounting to approximately $1,600,000 annually, based on operations in 1941. In view of the substantial traffic increase in 1942, it is evident that the suspended rates would yield materially more than originally contemplated.

Based upon the foregoing, we find and determine that the rates and charges contained in respondent's Tariff Rail Pa. P.U.C. No. 3 and Tariff Bus Pa. P.U.C. No. 3, as respectively supplemented, are unjust, unreasonable, and would in the aggregate produce an unreasonable amount of operating revenues annually, and that the rates and charges as set forth in respondent's Tariff Rail Pa. P.U.C.

No. 1, and Tariff Bus Pa. P.U.C. No. 2 are just and reasonable rates to be charged for the services in question.

Dissenting Opinion

BUCHANAN, Commissioner, dissenting: That the new Philadelphia Transportation Company would soon file a new tariff increasing rates throughout its system was completely evident the day the Pennsylvania Public Utility Commission placed a valuation of approximately $85,000,000 upon the old Philadelphia Rapid Transit property in the reorganization proceeding in 1938.

Such a valuation on a property greatly obsolescent was a direct invitation to increase rates in order to show a fair return on the mythical "fair value." And three years later the obvious result of the 1938 blunder took place.

But the company did not foresee that the demands of a globe wide, total war would completely transform the motor car industry to the war effort; that war could and would be brought to our eastern and western shores; that nothing was safe from an enemy military machine of high efficiency and daring and that all of these things and more would react to the advantage of mass transportation systems in the step-up of our industrial offensive effort.

Indeed the increase in war traffic on mass transportation systems was making itself evident at the time the new rates of P.T.C. were filed with the Commission in July, 1941. Net income after depreciation and taxes increased approximately half a million dollars in 1941 over 1940. Then over night Pearl Harbor made all transportation systems inadequate. Consequently, the rate increase forecast by and predicated upon the fictitious valuation of 1938 quickly lost all merit as a result of daily mounting revenues.

Despite the fact that the revenues had actually become excessive even upon the 1938 valuation, the company would not withdraw the new tariff without some stipulation by the Commission that the record would remain open. This the Commission refused to do although humbling itself in its efforts to have the company voluntarily withdraw the new tariff. This controversy seemed trivial on both sides inasmuch as the record, having been made, could always be incorporated, in a new action simply by motion.

While the majority finding of value in the instant case is an improvement over the 1938 order to the extent of some $8,000,000, in approaching an actual valuation of the used and useful property, it is my opinion that such reduction is not sufficient to escape the same inevitable result of a future application for a rate increase when the war influence upon revenues has subsided.

My principal difference with the majority in this order is in the method of determining the value of the property of the Philadelphia Transportation Company upon which it is entitled to earn a return.

In the 1938 reorganization the original cost of the property used and useful in the public service was determined to be $103,000,000 and that said property had depreciated approximately $48,000,000 leaving net value of the property of $55,000,000.

In the order of October 3, 1938, 26 PUR(NS) 65, the entire Commission

became confused in the matter of calculating depreciation and apparently adopted a 4 per cent sinking-fund method of calculating depreciation in substitution of a straight-line figure, labeling the result as a "judgment" figure and deducting it from cost. Such use of a 4 per cent sinking-fund method has been condemned by both state and Federal courts. See Solar Electric Co. v. Public Utility Commission (1939) 137 Pa Super Ct 325, 31 PUR(NS) 275, 9 A(2d) 447; Natural Gas Pipeline Co. of America v. Federal Power Commission (1942) 315 US 575, 86 L ed —, 42 PUR (NS) 129, 62 S Ct 736.

The net 1938 figure of $55,000,000 brought forward by adding the cost of additions and betterments and deducting charges to depreciation, gives a net figure of $57,000,000 as of December 31, 1941, to which should be added $2,500,000 for working capital, materials and supplies, and $3,325,000 for equipment purchased in 1942, making a total of $63,000,000 as the rate base under the original cost method. Such rate base is $14,000,000 less than that used by the majority and approximately $3,0000,000 less than the lowest rate base which the majority considered.

It is my opinion that even despite the sanction of the Commission staff, not sufficient consideration has been given to the element of obsolescence and the decadence of the art of street railway transportation and that even the basis of original cost as determined is too high under all of the circumstances. In support of this position, I recite the two following facts:

Respondent's Exhibit 1-A sets forth the income of the Philadelphia Transportation Company available for return to the company after depreciation and taxes for the years ended December 31, 1940, and December 31, 1941.

Granting that 1941 reflected to some extent the influence of the war effort, the net income of $3,920,000 for that year capitalized at 6 per cent, would just equal $65,000,000, while the net income of $3,520,000 in 1940 similarly capitalized would show a justifiable capitalization of $58,500,000.

In my opinion 1940 was a normal operating year for street railways. And following the present struggle I have no doubt that revenues will return to the 1940 level. On that level a rate base and a capitalization of between $55,000,000 and $60,000,000 are justified.

My second reason is that market values of respondent's securities do not reflect either rate base or capitalization in excess of $55,000,000. In Respondent's Exhibit No. 25 is set forth bond asking prices as of December 31, 1941. A mathematical computation of all market values therein set forth gives a result of $49,000,000 as a market value of respondent's bonds. Likewise, upon cross-examination of respondent's witness Coffman, it was developed that the market value of the stocks of respondent outstanding totaled approximately $4,000,000 or a total of $53,000,000 as the market value of respondent's securities as of December 31, 1941.

Ordinarily market value of securities would have little weight in fixing the value upon a piece of property, although since the creation of the Securities and Exchange Commission, and the advent of "truth in securities" policy this condition is rapidly chang-

ing. The securities of the Philadelphia Transportation Company, however, are somewhat removed from the ordinary rule. The company was reorganized in 1938. Facts and figures were available to the public and although securities to the face value of $85,000,000 were issued, within three years they had found a level of approximately $53,000,000 which not only reflects the bad judgment displayed in the reorganization proceedings but gives a pretty good indication of what the public thinks the real values of the securities are.

Inasmuch as respondent's securities did not exceed $53,000,000 as of December 31, 1941, and the original cost of respondent's property has been determined to be $63,000,000, and since normal earnings of the company when capitalized indicates a value of $58,000,000, clearly there is a difference from $14,000,000 to $24,000,000 between the public's judgment of the value of the respondent's property and that as determined by the Commission majority at $77,000,000. This can readily be explained as a failure to give full credit to the decadence or obsolescence of the street railway industry in calculating the proper depreciation requirement.

On the basis of the record and with predominant weight being given to the three items above mentioned, namely:

1. Original cost less straight-line depreciation with full recognition of a dying art.

2. Capitalization of revenues for the years 1940 and 1941.

3. Market value of securities.

I am firmly of the opinion that the rate base in the present matter should not exceed $55,000,000.

In finding such a rate base it must be applied against present revenues and inasmuch as the revenues for the year 1942 up to date indicate net income on December 31, 1942, will exceed a 6 per cent return on the rate base of $77,000,000 found by the majority, such revenues would be grossly excessive upon a rate base indicated by me. For that reason, I am constrained to dissent from the majority opinion as to the fairness of the present tariffs and believe that some adjustment should be made therein taking into consideration, however, the fact that the 1942 revenues are greatly inflated by the effects of the war.

Finally the history of the Philadelphia Rapid Transit Company reorganization proceeding should be studied with great care at the other end of the state. Pittsburgh Railways Company presently is undergoing a proceeding similar to that experienced by Philadelphia Rapid Transit Company in 1938. If realities are not faced with fortitude and with a determination to really "clean house," it is to be anticipated that this Commission will be entertaining applications for rate increases from Pittsburgh Railways Company following its reorganization even as we have experienced them in the Philadelphia Transportation Company.

The evil to be guarded against if the companies are to exist is not to try to earn a normal return on an inflated capitalization. With some diffidence I call attention to my dissent dated November 22, 1938, in Re Philadelphia Rapid Transit Co. 19 Pa PUC 340, 343, 26 PUR(NS) 154.

BEAMISH, Commissioner, concurring: I agree with the conclusion of

the order that cancels the proposed increases of the rates and charges applied for by the Philadelphia Transportation Company, and directs the establishment of the present rates and charges.

I dissent emphatically from that part of the report that indicates a rate base of $77,000,000 for the following reasons:

1. This was not a true rate case, but a legalistic subterfuge devised for the purpose of validating fraudulently issued securities for which no cash has ever been paid. One has only to read the report of Honorable Charles McChord which is a part of this record to realize that a flood of water was poured into the capital structure and that political pirates muscled into the Philadelphia Transit ring with another issue of stock for which no cash was paid.

Various moves, including a reorganization, have failed to purge the capital structure of these fraudulent stocks. The proportion of stock for which cash was paid to the stock issued as wind, water, and graft remains in the capital structure today. A study of McChord's report in my judgment indicates that about forty per cent of the stock of the P. T. C. represents this wind, water, and graft. If $77,000,000 is the total valuation, then, in my judgment, the true rock bottom cash rate base should be somewhere between $40,000,000 and $50,000,000.

2. The car riders of Philadelphia are paying the present fares upon grossly inadequate equipment and grossly inadequate service. Car seats have been ripped from subway cars so that paying passengers may be jammed together in great discomfort and surface equipment is likewise overburdened. One cannot fairly consider as a rate base a figure which calculates fares upon such conditions.

3. Philadelphia Transportation Company filed its proposed increase upon false allegations. It alleged that it needed increased revenue to meet a proposed increase in wages and to establish credit for additional equipment. The increase in wages was made without any increase in fares and the company received credit for all the equipment it required without any increase in rates. Not only were wages increased, but the executive officers of the company voted increases in salary to themselves. This, in my judgment, was an immoral action which was against the interests of the cash investors as well as against the interests of the car riders. In my judgment, the executive officers should be trustees only for cash investors. They seem to be taking good care of themselves as well as of the shares of the pirates who freely watered the capital structure.

4. Previous rate cases for increased fares were granted by the Public Service Commission without the establishment of a rate base and these findings were approved by the supreme court of Pennsylvania. The Public Service Commission alleged that, since the value of the property exceeded $200,000,000, and the earnings were so disproportionately small, it was not necessary to fix a rate base. Now the reverse of the picture is before us. The earnings are so huge and the value of the cash shares paid for the property is so disproportionately small that there is no present necessity to fix a definite rate base.

Rates under the decision of the Supreme Court of the United States should be fixed upon the cash investments of the public utilities. In this case, instead of a rate base that should be solid as a rock, we are attempting to make a rate base of a huge mud pie. That is not common sense; neither is it good regulatory practice.

We find in the McChord report a quotation from a decision by the supreme court of Pennsylvania that declares that the Public Service Commission had no right or authority to investigate the capital structure of the Philadelphia Rapid Transit Company. I quote from that report:

"The rights of the underlying companies to receive the full rental contracted for has been definitely determined by the supreme court of Pennsylvania on appeal from an attempt by your Commission to bring those rentals within your regulatory jurisdiction. In denying the power of the Commission or the courts to interfere with these 'fixed charges for franchises and assets long since acquired,' the court said: 'Moreover, if the statute gives to the Commission the power to reduce these rentals, it may also increase them, a conclusion which would be a great surprise to everybody, and against which, if decreed, these interveners would be among the first to complain. As the matter now is, the law gives neither right, and hence, the Commission should at once have halted this attempt to induce it to exceed its powers.'" (Philadelphia City Passenger R. Co. v. Public Service Commission, 271 Pa 39, PUR1921E 581, 594, 114 Atl 642.)

To me, this is juridical double talk. It is not good law; it is not good sense. To coin a word, I would say that is is juridiculous.

Decision on Exceptions

By the COMMISSION: By order nisi dated September 9, 1942 (printed herewith, ante, p. 257) we terminated the above proceeding upon findings that the present rail and bus rates of respondent are reasonable and that the rates proposed by respondent in Tariff Rail Pa. P.U.C. No. 3 and Tariff Bus Pa. P.U.C. No. 3, were unreasonable and would yield excessive revenues annually. The order nisi was served on September 12, 1942, and fifteen days therefrom were allowed for respondent to file exceptions thereto if it so desired.

Concurrently with the issuance of the order nisi in the Commission's case (C. 13608) we issued an order nisi in the complaint of the city of Philadelphia (C. 13595) against the proposed rates, in which were adopted the findings in the Commission's Case. Fifteen days were allowed for the filing of exceptions thereto.

In both cases, the final day for filing exceptions was September 28, 1942, on which date exceptions were filed by respondent. None was filed by the city. Oral argument on the exceptions was held on October 1, 1942.

There are sixty-nine exceptions to the order of the Commission, six exceptions to the dissenting opinion of Commissioner Buchanan, one exception to the concurring opinion of Commissioner Beamish and one exception (No. 77) which presents exceptions one to seventy-six, inclusive, as exceptions not only to the order nisi at C. 13608, but also as exceptions to said order as the order nisi in the city's complaint at Docket C. 13595. The

instant order will dispose of the exceptions in the light of the printed briefs and oral argument; however, the findings made herein will be adopted as the findings in the city's complaint at Docket C13595.

The sixty-nine exceptions to the order nisi have been assigned to three main categories in respondent's brief, namely rate base, fair return, and operating expenses and taxes. This classification adheres to the form of the order nisi, and our disposition of the exceptions in the instant order will be in conformance therewith.

Many of the exceptions are general in character and their validity depends on the validity of the exceptions to the specific findings. The general exceptions allege that the entire order nisi is arbitrary, unlawful, in contravention of the Fourteenth Amendment to the Constitution of the United States and of the First and Tenth Sections of the First Article of the Constitution of Pennsylvania; failed to make findings in accordance with respondent's requests for specific findings of fact; is against the evidence; is against the weight of the evidence; ignores substantial and uncontradicted evidence; is against the law; is in conflict with decisions of the Public Service Commission, affirmed by the superior court, in previous rate matters involving Philadelphia Rapid Transit Company; and is generally invalid.

I. *Rate Base*

(*Exceptions Nos.* 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77.)

[32] The order nisi found the fair value of respondent's property, used and useful in the public service, to be $77,000,000, including working capital, cost of financing, and the estimated cost of new equipment to be purchased in 1942. Respondent claimed an allowance of $110,000,000. Exception is taken (No. 15) to our allowance because the order nisi finds "as the fair value of respondent's used and useful property for rate-making purposes an amount lower than and inconsistent with the value found by the Commission in the reorganization proceedings for the same property to support the securities issued and assumed by respondent." By this and related exceptions, respondent raises the question as to whether the Commission, in this rate proceeding, is obligated to fix a rate base equivalent to or more than the total of the capital securities issued by respondent with Commission approval, following reorganization of respondent's predecessor, Philadelphia Rapid Transit Company. The reorganization was approved by the Commission on November 22, 1938, 26 PUR(NS) 154 and registration of the securities was approved on December 4, 1939.

Respondent emphasizes the fact that Commission approval was given to the reorganization plan and securities issued and assumed consequent thereto, contending that a rate base finding should be at least equal to the total of such securities and that consideration of other factors, such as reproduction cost, original cost, accrued depreciation, etc., would indicate a rate base in excess of the securities. Respondent attempts to support this contention by citing our declaration in the

order nisi in the Peoples Natural Gas Case, issued March 4, 1942, 43 PUR (NS) 82, 109, that "invested capital may serve as an important index of the minimum fair value." However, respondent evidently realizes that the invested capital in the Peoples Case and the securities outstanding in this case are not similar in nature. In its brief in support of the exceptions respondent refers to the total of the securities as "adjudicated investment value" and argues that this would be the minimum fair value for it.

There are important distinguishing characteristics between the invested capital referred to in the Peoples Case and the so-called "adjudicated investment value" in this case. In the former case an exhibit was submitted in evidence showing the amount of investment made in Peoples' securities at time of issue, from inception of the company to December 31, 1938, a period of fifty-five years. These securities consisted of common stock for the entire period and preferred stock for part of the period. At December 31, 1938, common stock only was outstanding. To the common stock at that date was added the surplus account, the result being invested capital in the amount shown in the exhibit. In the Commission's determination of the case in the order nisi, adjustments were made to add advances made by the owners and to make certain deductions, the net result being the invested capital as considered in the finding of fair value. The Commission said:

"We believe that $12,744,126 is the more equitable figure to use, for it recognizes the existence of *all the dollars belonging to the owners which remain in respondent,* without regard to whether they represent permanent or temporary investments." (43 PUR (NS) at p. 100).

It was this minimum figure of $12,744,126 which was considered by the Commission as "an important index of the minimum fair value." There is no basis in the record in the instant case for making a comparable determination.

On October 3, 1938, 26 PUR(NS) 65, the Commission issued an order disapproving the plan of reorganization then under review. On November 17, 1938, a petition for reconsideration was filed and on November 22, 1938, *supra,* an order was issued granting approval. In the petition for reconsideration, Philadelphia Rapid Transit Company, applicant, suggested certain adjustments in the accounts, to the end that a total capitalization of $85,000,000 would result, instead of the capitalization of $99,000,000 which was disapproved in the order of October 3, 1938. Without passing specifically upon each adjustment suggested, approval was granted in the order of November 22, 1938. It should be noted, however, that in the order of October 3, 1938, the Commission made a determination of the value of respondent's physical assets depreciated in the amount of $73,442,769, excluding property not used or useful and the Willow Grove Park property. If we add thereto our allowance in this case for working capital and materials and supplies in the aggregate amount of $2,500,000, a total of $75,942,769 is derived. The order of November 22, 1938, did not alter the value found in the preceding order, nor was any indication given that it should be altered.

Respondent's contention that a proper rate base should not be below the total capital structure is not supported by the Public Utility Law at §§ 603 and 918. The former, which deals with the registration and rejection of securities certificates, provides, inter alia:

"No registration, however, shall be construed to imply any guaranty or obligation on the part of the commonwealth of Pennsylvania as to such securities, nor shall it be taken as requiring the Commission, in any proceeding brought before it for any purpose, to fix a valuation which shall be equal to the total of such securities and any other outstanding securities of such public utility, or to approve or prescribe a rate which shall be sufficient to yield a return on such securities or the total securities of such public utility."

In § 918, which applies to the effect of certificates, licenses, and permits, the following language is included:

"The registration of any securities certificates shall not be deemed to require the Commission in subsequently determining the rates to be charged for the service of any public utility, to provide a rate which shall be sufficient to yield a return on such securities."

Upon consummation of the reorganization and issuance of respondent's securities, the security holders were emphatically put on notice with respect to these provisions of the Public Utility Law. In the order of November 22, 1938, 26 PUR(NS) at p. 155, relating to the reorganization, the Commission said:

"The present application is before us merely for the approval required under § 77B of the Federal Bankruptcy Act. This report and order should not be construed as requiring the Commission in any proceeding brought before it under the Public Utility Law of the Commonwealth of Pennsylvania for any purpose to fix a valuation which shall be equal to the total of the securities proposed under the applicant's plan, or to approve or prescribe a rate which shall be sufficient to yield a return on said securities."

In the order dated December 4, 1939, approving the issuance of securities, the Commission stated:

"Registration of said securities certificates and approval of said applications are not to be construed as requiring the Commission, in any proceedings brought before the Commission under the Public Utility Law of the commonwealth of Pennsylvania for any purpose, to fix a valuation which shall be equal to the total of the securities proposed to be issued, or to approve or prescribe rates which shall be sufficient to yield a return on said securities."

Our finding of a rate base of $77,000,000 was a judgment determination based upon all the facts of record. We considered: reproduction cost less depreciation and gave it weight, although, under the Natural Gas Pipeline Case (1942) 315 US 575, 86 L ed —, 42 PUR(NS) 129, 62 S Ct 736, we were under no obligation to do so; original cost depreciated; book cost less depreciation reserve; par or stated value of securities outstanding, and market value of securities outstanding. Respondent claims, in effect, that our consideration of all elements, other than par or stated value of securities, should be limited to a

determination of the extent to which the fair value finding should exceed the securities outstanding. It seeks, therefore, to make the securities the controlling element.

As stated in the order nisi, we made an independent determination of fair value for the purpose of permitting the prescription of reasonable rates. Securities were considered with the other elements but were not given predominant weight, either as to their par or stated value or as to their market value. This conforms to the law, which requires consideration of all elements, although the decision of the Supreme Court of the United States in the Natural Gas Pipeline Case, *supra*, would not seem to require consideration of reproduction cost, the highest element of value in this case.

Throughout the trial of the instant case, in the briefs and in oral argument, respondent has contended that the approval with respect to the reorganization binds the Commission to the establishment of a rate base in an amount not less than the total of the securities issued plus capital surplus. However, respondent has been careful to avoid any implication that it considers itself bound in any subsequent litigation by any finding in the reorganization case. In Par. 6 of the petition for reconsideration the following statement is made in this connection:

"6. The foregoing suggestions as to the recognition of additional assets values are here submitted to the Commission as suggestions only and in a desire to make plain to the Commission how readily the November amended plan can be approved by findings well within the conservative and established business and legal principles affecting assets values. *Neither these suggestions nor anything else contained in the petition nor the petition itself is to be taken as waiving or prejudicing in any way the petitioner's rights to press upon appeal or otherwise in any litigation its full claims which may properly be raised in an appeal in this proceeding or in any other litigation with like force and effect as if this petition had not been presented, and all such rights are reserved.*" (Italics supplied.)

Accordingly, respondent would bind the Commission but would not bind itself.

Exceptions were taken by respondent to various individual items of cost and value, of which paving and working cash capital are important items. Exception was also taken to our accrued depreciation findings. The order nisi developed the bases of all of the findings made and we discern no indication in the briefs or argument of respondent that such findings were erroneous.

In view of the foregoing we will dismiss all exceptions relating to Fair Value, or Rate Base as it is termed by respondent.

II. *Rate of Return*

(*Exceptions Nos.* 1, 6, 7, 8, 9, 10, 11, 12, 13, 14, 22, 23, 52, 53, 54, 55, 56, 57, 66, 67, 68, 70, 72, 76, 77.)

Respondent takes exception to our allowance of 6 per cent for rate of return, claiming that a minimum of 7 per cent should be allowed.

Our reasons for the adoption of an allowance of 6 per cent are given in detail in the order nisi at pages 35 to 46, inclusive. We can see no basis for

changing the allowance made and will accordingly dismiss all exceptions relating to Rate of Return, or Fair Return, as it is termed by respondent.

III. *Operating Expenses and Taxes*

(*Exceptions Nos.* 1, 7, 8, 9, 10, 11, 12, 13, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 70, 76, 77.)

[33] Respondent excepts to the disallowance of contributions and donations, rate case expenses, increase in expenses recorded in 1941 due to change in inventory method and the so-called sinking-fund or continuing franchise payments to the city of Philadelphia. The order nisi explains the bases on which the first three of these items were disallowed and we see no reason to change our findings with respect thereto. Therefore, we will dismiss the applicable exceptions. However, we will sustain the exception (No. 64) relating to the payments to the city of Philadelphia, which amounted to $240,000 in the twelve months ended June 30, 1942, and which will amount to $300,000 annually, beginning July 1, 1942.* Due to sustaining this exception we will revise our computations of allowable operating revenues correspondingly.

In the order nisi, an allowance of $375,000 was made in order that wage increases made, effective August 1, 1941 and January 1, 1942, would be included in operating expenses for a full year. Respondent excepts (No. 61) to this portion of the order nisi "for the reason that the Commission fails to make mention or give consideration or weight to the pending demand upon respondent for a general wage increase of 10 cents per hour or $2,500,000 per year which is now pending before the National War Labor Board, evidence of which was excluded from the record by the Commission in its denial of respondent's application to open the record filed August 12, 1942, to which action of the Commission, respondent on September 3, 1942, filed its exception, to which exception reference is hereby made and which exception is hereby renewed."

In an order dated August 25, 1942, we denied respondent's application to reopen the record, stating:

"We are fully cognizant of the fact that wages constitute a large item of the operating expenses of respondent and that any change in its wage rate level, or the cost of any other item of operating expense, would affect the total operating expenses. We are cognizant also of the fact that the cost of all items of operating expenses changes from time to time. Whether or not any change is substantial enough to warrant the opening of a record, so as to permit the production of evidence relative to such change, can only be determined after the change has actually become effective. Whether the findings of the National War Labor Board will effect any change in the wage rate level of respondent is, at this time, purely speculative and uncertain."

We are of the opinion that no additional allowance should be made at this time and we will, therefore, dismiss the applicable exception.

We are of the opinion that Exceptions Nos. 70 to 76, inclusive, relating to the dissenting opinion of Commissioner Buchanan, and the concurring

* For discussion of this question in original order see ante, p. 297.

opinion of Commissioner Beamish, are irrelevant, immaterial and should not be considered; accordingly, they will be dismissed.

Conclusion

Further analysis of the record and consideration of respondent's exceptions develops that respondent is entitled to collect annually from the ratepayers the sum of $41,974,000 annually, computed as follows:

6% Return on fair value of $77,000,000	$4,620,000
Operating expenses	28,281,100
Rentals	2,538,600
Taxes	3,334,300
Annual depreciation	3,200,000
Allowable operating revenues	$41,974,000

The actual operating revenues were $41,936,800 in the twelve months ended June 30, 1942, or approximately equal to the allowable revenues. On the basis of respondent's forecast for 1942, from the present rates, and in view of the rapidly accelerating upward trend of revenues as shown by the latest operating statements, the revenues in the first eight months of 1942 exceeding the similar period in 1941, by $6,521,070 or almost 27 per cent, it is evident that the present rates will yield at least a fair return and that the increased rates sought by respondent will yield an excessive return; therefore,

Now, to wit, October 13, 1942, it is *ordered:*

1. That the exceptions of respondent be and are hereby sustained to the extent (1) that an allowance be and is hereby made for the sinking-fund payment to the city of Philadelphia in the amount of $300,000, annually; (2) that the allowable annual revenues, due to this revised finding, be increased to $41,974,000, and that the order nisi of September 9, 1942, be and is hereby amended accordingly.

2. That the exceptions of respondent be and are hereby dismissed in all other respects.

3. That the order nisi of September 9, 1942, as modified herein, be and is hereby made the final order in this proceeding.

4. That on or before October 15, 1942, Philadelphia Transportation Company, respondent, file with the Pennsylvania Public Utility Commission a supplement to Tariff Rail Pa. P.U.C. No. 3, canceling the rates and charges set forth therein and reëstablishing the rates and charges as set forth in its Tariff Rail Pa. P.U.C. No. 1.

5. That on or before October 15, 1942, Philadelphia Transportation Company, respondent, file with the Pennsylvania Public Utility Commission a supplement to Tariff Bus Pa. P.U.C. No. 3, canceling the rates and charges set forth therein and reëstablishing the rates and charges as set forth in its Tariff Bus Pa. P.U.C. No. 2.

6. That upon compliance with order paragraphs 4 and 5, this proceeding is terminated and the record marked closed.

Commissioner Buchanan files dissenting opinion; Commissioner Thorne being absent did not participate in the final vote on this order.

Dissenting Opinion

BUCHANAN, Commissioner, dissenting: The standards which should have been followed by the Commission in the 1938 reorganization are: First, capitalization of earnings, Consolidat-

ed Rock Products Co. v. Du Bois (1941) 312 US 510, 85 L ed 982, 61 S Ct 675; In Re Jacksonville Gas Co. September 22, 1942, — F Supp —, 45 PUR(NS) 193. Second, original cost less depreciation. The lesser of these two tests is the proper base for issuance of reorganization securities. The reasons are obvious.

The standards which the Commission should have followed in the instant case were original cost less depreciation, with depreciation properly related to actual conditions in the industry during normal times. As an illustration of the import of the special consideration of the depreciation accrual, the record shows various plans have contemplated the retirement of as much as 146 miles of track out of a total of about 500 miles and the addition of 400 busses to the system between 1938 and 1941 inclusive. Great weight must be given to obsolescence and decadence of the art of street railway transportation.

The Commission in the reorganization proceeding and in this rate proceeding has adopted a "judgment" figure under the "fair value" rule of Smyth v. Ames (1898) 169 US 466, 42 L ed 819, 18 S Ct 418, which was incapable of standardization. But Smyth v. Ames is as dead as the proverbial Friday mackerel. Natural Gas Pipeline Co. of America v. Federal Power Commission, *supra*. Now only statutory standards apply to rate making to the exclusion of judicial fiat.

The only specific rate-making standards appearing in the Public Utility Law, Act 1937, PL 1053, as amended, are those contained in Art. III, § 310, both of which are based on depreciated original cost. Under such standards, the rate base should not exceed $55,000,000, including working capital (at a sum greatly reduced from the $1,000,000 allowed by the majority), materials and supplies at $1,500,000; no allowance for cost of financing (the amount is incapable of proof as adopted by the majority) and excluding additions to the rolling stock because title is not in the company but is held under a lease contract under which payments are chargeable to expense.

This base is not the lowest possible rate base to be found nor is it advanced for the purpose of "squeezing the last penny out of the company" as contended by the city of Philadelphia at the oral argument. It is fundamental ratemaking based on sound principles. It is distinct from "compromise," guesswork, and "judgment" as day from night. It is as fair for the security holder as the ratepayer because under it the security holder would get a return which he gets now only by virtue of the effect of war on transportation.

It is equally fundamental that there is a direct relationship between values arising from reorganization proceedings and values arising from rate making. They must be one and the same thing, else either the security holder or the ratepayer is duped and the Commission has performed a vain act.

The principal difficulty which the majority has experienced in this proceeding has been in its efforts to correct the wrong perpetuated to both ratepayer and the security holder under the 1938 reorganization. The majority has met that difficulty by com-

promise and shields itself behind §§ 603 and 918 of the Public Utility Law in so doing.

But §§ 603 and 918 of the Public Utility Law do not apply here and were intended only to apply to refunding and refinancing operations in relation to ratemaking and to protect the commonwealth from a guaranty of the obligation. Both provisions are unnecessary. The company on the other hand would try to correct one wrong by committing another, i. e., raising the rate base to the inflated level of the securities. Our sole consideration under the Public Utility Law is for the protection of the ratepayer, the theory being that the security holder can and usually does take care of himself and this case is no exception. This being true it is our duty to find the proper rate base and let the securities seek that level which is now and was in 1938 the proper level for the issuance of those securities.

The company contends that it has now "more and better" property than in 1938 meaning, of course, the new street cars, trolley busses, and motorbuses, and therefore, it argues, an increased valuation over the 1938 figure is proper. But under the equipment obligations it does not hold title to a single wheel or unit of any of the new equipment, the credit of the company was not required to obtain it, and therefore it has no capitalizable rights in the new rolling stock whatsoever. Its interest is merely a lease arrangement with the rentals chargeable to operating expense and the vehicles thereby becoming fully depreciated if and when title is acquired. Likewise the "more and better" equipment includes some 400 or more street railway cars (the record is somewhat confused as to the number) restored to service from storage (fully depreciated) which the requirements of war transportation have demanded.

With every conceivable kind of vehicle being mustered by the respondent to meet transportation demands; with revenues soaring to unbelievable heights (as much as 35 per cent in excess of corresponding months in 1941) it ill becomes this respondent to seek a rate increase and on a rate base which is as completely out of line and unfair in the public interest as the proposed increase in rates.

A computation made of passenger revenues for the years 1923 to 1941 inclusive from the annual reports gives the following very illuminating picture: [Table omitted.]

It is to be noted that the highest revenues were obtained in 1926 [$52,736,096], that the lowest revenues were received in 1938 [$31,738,598] but that between 1932 and 1940 the revenues maintained a reasonably constant level averaging about $33,000,000. It is likewise to be noted that the upsurge in revenues in 1941 [$37,249,006] was due solely to war causes and not to any development of the art. What the present boom has definitely proven is that more riders, not higher rates, are the answer to the mass transportation problem and it is axiomatic that lower rates bring more customers.

In passing upon the exceptions, I would dismiss exceptions Nos. 1 to 14 inclusive, Nos. 16 and 17, 20, 21, 23 to 63 inclusive, 65, and 69, for the reasons set forth in this opinion.

Exception No. 15, I would dismiss for the specific reason that fair value is no longer a standard for rate mak-

ing in Pennsylvania since the decision of the United States Supreme Court in the case of Natural Gas Pipeline Co. of America v. Federal Power Commission, *supra*.

Exception No. 18, I would dismiss with the comment that the finding of accrued depreciation in this rate case is a correction of the error made in the reorganization proceeding. I would, however, admit that it is an elementary principle of regulation that there is a direct relationship between security issues and rate making. However, this principle does not apply in the instant proceeding as the Commission at the time of issuing the securities specifically stated that the values found by it in support of the issuance of the security order should not be considered as the values to be found for rate making purposes. It is my opinion that such statement is an open admission of the inflation which was present in the securities at the time of issue. But such statement was necessary wherever the fair value theory was applied because the fair value rule was itself inflationary.

Exception No. 19 should be dismissed with the remark that deduction of the accrued depreciation from original cost is proper and particularly so when the accrued depreciation is calculated on an age-life straight-line method as in the instant case. Natural Gas Pipeline Co. of America v. Federal Power Commission, *supra*.

Exception No. 22, is dismissed with the comment that to allow a 7 per cent return would have reduced the amount of the reorganization securities, to be issued, below the amount which I have found to have been proper through capitalization of earnings at 6 per cent.

For the reasons stated in the majority opinion, Exception 64 should be sustained.

Exception 66 should be sustained for the reason that required operating revenues as found by the Commission are excessive at least to the extent of a return calculated on a base of $77,000,000.

Exceptions 67 and 68 should be sustained for the reason that Tariff Rail Pa. P.U.C. No. 1 and Tariff Bus Pa. P.U.C. No. 2 are not just and reasonable rates to be charged for the services in question, but are excessive, based upon the allowable return calculated on the depreciated original cost rate base.

Exceptions 70 to 76, inclusive, relate only to concurring and dissenting opinions. Exceptions to those opinions would, of course, have no effect upon the disposition of the majority opinion. However, Exception No. 72, on the basis of the tables set forth in this dissenting opinion, passenger revenues during the period of nine years from 1932 to 1940, inclusive, are almost constant at $33,000,000. Therefore the available amount for interest and dividends from the operation of respondent's system in order to approach the figure of $5,800,000 must depend entirely upon operating economies. Such economies are problematical in view of the possible after-war effects. It is interesting to note that the 1938 amount available for interest and dividends while extremely high resulted from the lowest passenger revenue in the nineteen years tabulated.

In conclusion, I repeat that on a rate

base of $77,000,000 as found by the majority that net income of respondent is already in excess of a 6 per cent return. On a base of $55,000,000 which, I believe follows statutory standards a reduction is undoubtedly necessary. This reduction could take the form of a weekly pass at a reduced cost which would benefit the regular rider.

I therefore dissent from the the majority order.

NEW YORK DEPARTMENT OF PUBLIC SERVICE, STATE DIVISION, PUBLIC SERVICE COMMISSION

168 Residents of Edgemere Drive, Rochester

v.

Rochester Transit Corporation

[Case No. 10835.]

Service, § 178 — Bus route extension — Necessity of local consent.

1. An extension of a bus route may be ordered under the so-called Parsons amendment (adding provisions to §§ 63-a and 63-b of Art. 3-A of the Public Service Law) without a local consent from the municipality in which the transportation company operates, where no part of the proposed route is situated in the city, p. 316.

Statutes, § 25 — Repeal by implication.

2. The courts do not favor the repeal of a statute by implication, p. 316.

Service, § 178 — Bus route extension — Necessity of local consent.

3. Sections 66 and 67 of the Transportation Corporations Law (providing that a municipal consent is necessary for the operation of an omnibus line) are still controlling notwithstanding the so-called Parsons amendment (adding provisions to §§ 63-a and 63-b of Art. 3-A of the Public Service Law to provide for Commission orders to extend service), and, therefore, the Commission should not order an extension into a town unless the consent of the town has been obtained, p. 316.

Service, § 51 — Powers of Commission — Bus extension.

4. The Commission can require a transit corporation to extend a bus route from municipal limits into a town if the necessary consent of the town is supplied, p. 316.

[August 20, 1942.]

COMPLAINT *against failure of transit corporation to extend and render omnibus service; denied without prejudice to renewal.*

APPEARANCES: Gay H. Brown, Counsel (by Richard C. Llop, Principal Attorney), for Public Service Commission; Chas. B. Forsyth, Cor-

poration Counsel, Rochester, for city of Rochester; Van Schaick, Woods & Warner (by Howard W. Woods) Rochester, and O. W. Gulick, Rochester, Assistant Secretary, Rochester Transit Corporation, for the Rochester Transit Corporation; William G. Easton, Greece, Town Attorney, Andrew J. Schell, Rochester, Councilman, town of Greece, Braddock Heights Subdivision, and Gordon A. Howe, Rochester, Supervisor for the town of Greece, for town of Greece.

BURRITT, Commissioner: This is one of the first applications received by the Commission for service under Chap. 897 of the Laws of 1942, which amends §§ 63-a and 63-b of the Public Service Law. The amendment is commonly referred to as the Parsons Act. The petition involves a consideration of questions as to the requirements of the law as well as of the facts.

The business area and most of the residential areas of the city of Rochester are situated several miles to the south of the shore of Lake Ontario, but the city includes a comparatively narrow strip on either side of Lake avenue and the Genesee river extending northward to the lake. The Rochester Transit Corporation furnishes the public with bus transportation in the city, including a bus line on Lake avenue between the downtown section and Lake Ontario. This route has been extended westerly about one mile on Beach avenue along the lake shore to the westerly city line at the lake. Edgemere drive is an extension of Beach avenue and extends westerly along the lake shore from the city line through the town of Greece to Long Pond road and beyond.

Residents along Edgemere drive to the number of 168 have filed a petition with the Commission asking that the Rochester Transit Corporation be directed to extend its line and render service along that street. A hearing was held at Rochester on June 19th. Supervisor Howe of the town of Greece, and a number of witnesses, urged that convenience and necessity require the approval of this route. The parties were asked to file briefs on the legal questions involved by July 1st, and the hearing was adjourned to July 24th. Subsequently, upon advice that no further hearing was desired by the parties, the hearing was adjourned without date. Brief was filed by attorneys for the Rochester Transit Corporation about June 29th, and by the attorney for the town of Greece on July 18th.

No consent has been requested of, or granted by, either the town of Greece or the city of Rochester. The supervisor of the town of Greece stated: "We are ready, willing, and anxious to grant it anytime the request is made." No application for consent has been made by Rochester Transit Corporation, which has indicated that under present conditions it does not intend to do so, as it claims that it has a deficiency in bus equipment now, that it is unable to secure delivery of busses ordered, and that the instant application is only one of about 50 similar applications recently received by the corporation. The position of the city of Rochester as stated by Corporation Counsel Forsyth is that it has no objection to the extension of this bus route as such, but that it has a contract with the Rochester Transit Corporation to furnish adequate trans-

portation service within the city and that it is concerned that no extension be made at this time which would impair that service.

Legal Questions

[1–3] The so-called Parsons amendment adds provisions to §§ 63-a and 63-b of Art. 3-A of the Public Service Law which, briefly stated, provides that upon complaint in writing of not less than twenty-five persons as to extension of a route or routes, the Commission may cause an investigation to be made as to the necessity of the proposed extension, and after investigation, if it finds that public convenience so requires, "may order such an extension of an existing route or routes as is deemed necessary." The section as amended is silent on the question of whether local consents are required as to whether the local transportation company may be required to furnish service without its consent.

Q. Are the consents of the city of Rochester and town of Greece necessary?

Attorneys for the Rochester Transit Corporation, reserving the right to later raise questions as to whether the proceeding is properly brought under the Parsons Act, or under the Whitney Act, and as to whether the Parsons Act, which in terms applies to "omnibus corporations" applies to the Rochester Transit Corporation which was incorporated under the Railway Law, argue that local consents of both the city of Rochester and the town of Greece are required. They contend that the Commission may not proceed in the matter at all because the city of Rochester has not given its consent. The Parsons amendment did not modify the statute in this respect. As no part of the proposed route is situated in the city of Rochester, this contention is rejected. The position of the attorney for the town of Greece on this point is well taken, and I find that no consent of the city of Rochester is required.

As to the town of Greece the situation is different since the proposed route lies entirely within that town. Sections 66 and 67 of the Transportation Corporations Law provide that a municipal consent is necessary for the operation of an omnibus line. The courts do not favor the repeal of a statute by implication. It would appear therefore that §§ 66 and 67 of the Transportation Corporations Law are still controlling. I am of the opinion that the Commission should not order the requested extension as authorized under the Parsons Act unless the consent of the town of Greece has been obtained pursuant to §§ 66 and 67 of the Transportation Corporations Law.

Q. Assuming that the necessary legal consent is granted by the town of Greece, and that public convenience and necessity is shown, can Rochester Transit Corporation be compelled to render the requested service?

[4] Counsel for Rochester Transit Corporation further contends that the Commission does not have the power under the Parsons Act to order the corporation to extend this route without the consent of the municipalities involved against its wish; and that even if consent were obtained from the city of Rochester the Commission has not power to order the Transit Corporation to extend its route without con-

sent. There may be a tenable constitutional argument here, but in any event this would have to be decided in the courts. In analogous situations, gas and electric companies have been required with the sanction of the courts to extend their service lines. I hold that if the necessary consent of the town of Greece is supplied, and if the facts as to convenience and necessity warrant, the Rochester Transit Corporation could be required to render the service requested.

With these legal conclusions in mind we may now review the facts of record to determine whether or not public convenience and necessity require the establishment of the route, and if so under what conditions.

Convenience and Necessity

Edgemere drive, on which bus service is requested, is a continuation of Beach avenue in the city of Rochester, westerly along the shore of Lake Ontario, through the town of Greece. Beach avenue extends about one mile west of Lake Avenue to the westerly city line. From here Edgemere drive extends westerly about 5 miles to Braddocks Heights, generally on a location from 100 to 200 or 300 feet from the shore of the lake. The proposed extension is asked only to Long Pond road, 3 miles west of the city line, at this time, due to an unsafe bridge beyond that point. Persons living along the shore as far west as Braddocks Heights would have to walk to Long Pond road. Edgemere drive is located practically on the roadbed of the defunct Manitou Beach Railroad Company, which formerly served this territory along the lake shore, but which was discontinued and abandoned in 1926. Since that time people along the lake shore in the town of Greece have had no public transportation, the nearest being the Beach avenue bus line. Recently under the sponsorship of Monroe county, and with the aid of Federal funds, there has been constructed a new continuous highway along the shore, except for a final length being completed this summer. This new road is located on, or closely parallel to, Edgemere drive.

This lake shore was formerly chiefly a summer resort area, but in recent years many persons have made their permanent residence here. It is claimed that of approximately 1,000 homes, about 50 per cent are occupied the year around by people who are employed in Rochester, and that of these a considerable number are now engaged in defense work. In partial support of this claim Councilman Schell of the town of Greece testified that in coöperation with the local fire department he had made up a list of 81 persons who, of his own knowledge, were year-around residents of Crescent beach, located near the eastern end of the proposed extension; that of this number 58 now work in defense plants; that 28 others are employed in essential civilian jobs, and 20 in jobs not connected with the war; and that there are 205 potential bus riders living at Crescent Beach. Mr. Schell, who lives at Braddocks Heights, 2 miles west of the western end of the proposed extension, also submitted a signed tabulation showing 130 families in that community of whom he stated from his knowledge of nineteen years residence there, that 85 are permanent residents. This tabulation

also showed a list of plants in Rochester said to be engaged in war work, and 101 permanent residents and 24 summer residents of Braddocks Heights who work in the plants. Still another list of more than 200 residents of Grandview beach, also located west of the proposed western terminus of the requested route, was submitted. There was no testimony regarding this list and it was filed for information only.

In further support of the petition several other witnesses testified as to the number of residents at various points along the route, and as to the need of public transportation. They were cross-examined by counsel for the Rochester Transit Corporation and others.

Mr. Emma testified that he had lived at Island Cottage, a community located about 1½ miles west of the city line, since 1923; that there are about 200 residents at Island Cottage, of whom 125 are year-around residents; that many people walk to the Beach avenue line and that there is a sidewalk only part of the way.

Mr. J. J. Wegman, a summer resident, testified that he had personally obtained all the signatures of the 168 signers of the petition submitted to the Commission; that he had asked them all if they favored the bus line, and that everyone asked had signed the petition.

Mr. George Knight, who has lived at Grandview Heights Drive for thirty-five years, testified that he had been secretary of the Grandview Heights Association for ten years and is now president; that he knew there were 139 homes in this area, of which 75 are occupied the year-around; that the area is 2½ miles from the city line, and that there is no bus service; and that he knows forty-two persons who work in defense plants and travel back and forth thereto every day.

Mrs. Ruth Nolan testified that she lives five minutes walk from Edgemere drive and that she has six children who attend Charlotte High School in Rochester and who would use bus service.

Mr. McKelvey testified that he has been a year-around resident of Edgemere drive, about ¾ mile west of the city line, since 1927; that he would use this bus line and that his household employees would use it. One or two other witnesses testified to the same effect.

It was stated that a shipyard is being constructed along the south shore of Round Pond at a location less than a mile south of Edgemere drive. It is anticipated that upward of 2,000 people would eventually be employed in building ships in this yard and that many of these people will settle along the route of the proposed bus extension. It was later brought out that this location is nearer to Dewey avenue on which the Rochester Transit Corporation now has a route. Counsel stated that he had been instructed by the president of the corporation to say that when the plant is completed its Dewey avenue line will be extended to serve workers there.

In my opinion the town of Greece has established that it would be convenient for a considerable number of persons to have bus service on Edgemere drive, and that if private cars become unavailable because of gasoline and tire restrictions, some form of public transportation on Edgemere

drive will be necessary. But whether or not public convenience and necessity requires that such service be established now, also depends on other and broader considerations, such as the availability of bus equipment and its most effective use, especially in the light of the war emergency.

Available Equipment

Superintendent of Schedules for the Rochester Transit Corporation, Mr. Herman E. Hicks, testified that he had made a study of the demands and requirements for equipment on the routes of his company, which showed that 512 busses are actually scheduled in service, whereas the company has only 485 busses at the present time. Service under this anomalous situation is made possible only because some of the busses are turned where they would otherwise not be permitted to be turned, and other temporary modifications in routes and schedules made which would otherwise not be authorized. He stated that the company has ordered 55 busses which were scheduled for delivery in June, but that delivery has been deferred; that the company is carrying 30 per cent more passengers than at the same time one year ago; and that in view of these facts the company does not have the requisite equipment to make any further extensions at this time. Counsel for the company also called attention to requirements and orders of the Office of Defense Transportation and to the company's obligation under its service-at-cost contract to maintain adequate service in the city of Rochester. No evidence as to schedules or fares on the requested route was submitted.

Recommendation

In the absence of a consent from the town of Greece and of specific proposals as to service and fares, and further in view of the fact that the Rochester Transit Corporation does not now have available the necessary equipment which can be spared, and in view of the requirements of the Office of Defense Transportation as to the use of available busses, the application of 168 residents of Edgemere Drive must be denied at this time without prejudice to its renewal when a consent of the town of Greece has been granted, the necessary equipment is available, and O.D.T. orders permit.

UNITED STATES CIRCUIT COURT OF APPEALS, SEVENTH CIRCUIT

Natural Gas Pipeline Company of America et al.

v.

Federal Power Commission et al.

[No. 7454.]

(129 F(2d) 515.)

Reparation, § 48 — Parties — Intervention — Other suits pending.

Gas consumers should be denied leave to intervene in proceedings before

the circuit court of appeals relating to the refund of charges collected in excess of those allowed by the Federal Power Commission, pending review, until and unless suits in other courts for like or similar relief are dismissed.

[June 26, 1942.]

MOTION *for leave to intervene in proceedings relating to refund of overcharges for gas; intervention denied. See* also *(1942) 129 F(2d) 515, 45 PUR(NS) 235. For decision of United States Supreme Court resulting in the instant proceedings, see (1942) 315 US 575, 86 L ed —, 42 PUR(NS) 129, 62 S Ct 736.*

APPEARANCES: George I. Haight and J. J. Hedrick, both of Chicago, Ill., and S. A. L. Morgan, of Amarillo, Tex., for petitioners; Wm. S. Youngman, Richard J. Connor, George Slaff, and Daryal A. Myse, all of Washington, D. C., for respondent Federal Power Commission; George F. Barrett, of Chicago, Ill., for respondent Illinois Commerce Commission.

Before Evans and Kerner, Circuit Judges.

PER CURIAM: There has been filed in this court, a motion for leave to intervene, by twenty consumers of gas furnished by Peoples Gas Light and Coke Company, Public Service Company of Northern Illinois, and Western United Gas and Electric Company. It is called the Joyce et al. petition. Said petitioners assert an interest in the moneys which we are about to refund to the consumers of gas distributed by the above-named, and other, utilities.

In their petition, which was filed upon previous order of this court, they seek to appear not only in behalf of themselves but on behalf of all other gas consumers and ratepayers similarly situated.

We are advised that these same petitioners have brought suit in the circuit court for Cook county, state of Illinois, seeking the same or very similar relief to that which is here sought. Also, they have filed a suit in the United States district court for the northern district of Illinois, for like, or similar relief.

We are of the opinion that their right to intervene in this court should be denied until and unless their suits in other courts are dismissed. Proceeding in this court by way of intervention is inconsistent and at variance with their action in the other two suits. Likewise, we are not satisfied, upon the showing made, that the twenty petitioners can, and do, adequately represent all the consumers similarly situated, who number more than 750,000. Weeks v. Bareco Oil Co. (1941) 125 F(2d) 84.

Should the petitioners dismiss the suits in the other courts, their motion, in their own behalf, for leave to intervene will receive favorable action.

Meter Accuracy Means More Revenue

• *Above—Testing a 4" Crest Meter in the N. Y. Meter Testing Station*
• *Right—Testing a 6" Protectus Meter in Service in Rockefeller Center*

Wide Wor

A HUNDRED YEARS AGO thousands of New Yorkers flocked to City Hall Park to see the fountain display fed by the newly opened Croton Aqueduct. New Yorkers of that day were proud of their new System, which DeWitt Clinton had outlined in 1833 to deliver 20,000,000 gallons a day.

One hundred years later New York City's water supply system delivers an average of 880,000,000 gallons daily. The City now covers the whole of Manhattan Island and has spread out to include four other boroughs.

Today one of its greatest attractions is Rockefeller Center, business headquarters of thousands and the mecca for additional thousands of visitors. Deep in the sub-basements, never seen by the public, are large meters which record the daily water requirements of this large population.

The original estimate of the water requirements of the RCA building alone contemplated a demand rate of 20,000,000 gallons a day—equal to the original estimated capacity of the Croton System.

This demand would have put such a burden on the present system that engineers devised a way of using water over and over in the cooling and air conditioning systems so that the requirement was cut to 1/3 of the original estimate.

Just what do meters mean to a city like New York? Of the 667,400 connections in New York City, 179,600 are metered, a large percentage in the larger sizes. From these metered services, which consume 22 per cent of the water, the City receives $16,400,000 or 42 per cent of its water revenues. But should these meters under-register as little as 3 or 4 per cent, the City would lose a staggering amount of money.

This is striking proof that meters should be tested regularly and that every city, as does the City of New York, should maintain a thoroughly equipped meter testing shop.

In these days of increasing cost in every phase of our life, the efficient Water Department cannot afford to lose revenues through under-registration of meters. Regular and systematic testing of all meters is the only safeguard against loss.

From the Bettmann Archives

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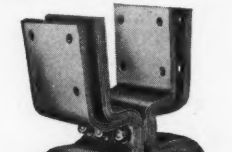
Industrial Progress

Selected information about products, supplies and services offered by manufacturers. Also announcements of new literature and changes in personnel.

Equipment Notes

Welding Transformer Designed for War Production Job

Speeding production of war materiel has created manufacturing problems oftentimes never experienced in the production of peace-



time goods. As a result much production machinery has been designed to perform a specific operation or function.

As an example, The Acme Electric & Manufacturing Co., Cuba, New York, announce the development of special welding transformers for operation on primary circuits of 115 volt, single phase, 60 cycle and having secondary characteristics of 0.75 volt, 1600 amperes.

Rags and Resin Product New Substitute for Corrugated Steel Sheets

Rags and resin have been combined into a war emergency building material substitute for corrugated steel sheets for covering outside walls of temporary structures of all kinds. Called corrugated asphalt siding, the new product was recently placed on the market by The Celotex Corporation and is being used for both government and private construction.

Corrugated asphalt siding consists of two sheets of heavy felt saturated with a recently developed resino-bituminous compound. The sheets are bound together with a high melting-point asphalt adhesive and corrugated under high pressure. The finished sheets are hard, rigid, light in weight and moisture-proof. They retain their stiffness and corrugations in summer weather because of the high melting-point, wear-resistant resins used in the saturating process. No critical raw materials are required, according to the manufacturers.

The life of corrugated asphalt siding can be prolonged indefinitely by coating or painting immediately after application and every few years thereafter, according to the manufacturers.

Further information may be obtained from The Celotex Corporation, 120 South LaSalle St., Chicago.

Silvered-Glass Reflectors Release Aluminum for Other Uses

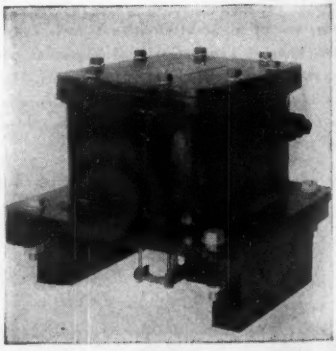
The use of silvered-glass reflectors in place of aluminum reflectors by General Electric has resulted in a saving of 360,000 pounds of aluminum in the manufacture of street lighting equipment, and another 200,000 pounds in other protective lighting devices such as searchlights and floodlights, according to A. F. Dickerson, manager of the company's lighting division.

Moreover, it is claimed that the efficiency of these lighting units, which are being used extensively in the war production program, has been increased from 10 to 30 per cent as a result of the substitution of silvered glass for aluminum and other metals.

New Operation Counter for Protector Tubes Offered by Westinghouse

A new operation counter for protector tubes used on 13.8 kv to 138 kv transmission lines is announced by Westinghouse Electric and Mfg. Co.

Six thin copper strips are arranged in a small square counter box which is mounted on



the vent pipe from the protector tube. When the protector tube operates, part of the gas blast leaves through the small side horizontal tube on which the counter is mounted, blows

Equipment Notes (Cont'd)

off a copper blade, and the box falls into another angular position. Each time a blade is blown out the new position of the counter indicates the number of times the protector tube has operated.

Instructions for the device give methods of mounting it on practically all types of protector tubes. Blades are available for reloading, and the counter is provided with a loop-shaped strap which makes it possible to install and remove it by means of a hook stick.

Further information may be secured from department 7-N-20, Westinghouse Electric and Mfg. Co., East Pittsburgh, Pa.

Catalogs and Bulletins

Engineering Data Bulletin on New Davis-made Solenoids

Two new Davis-made laminated solenoids (No. 2861 pull type and No. 2923 push-pull type) are described in a bulletin released by Dean W. Davis & Co., 549 W. Fulton St., Chicago.

These new solenoids are particularly designed for specification by engineer-designers for hydraulic valves and general industrial purposes. Maximum magnetic force for given electrical input is effected by design, laminated frame and plunger and other features. More work per watt input is demonstrated.

Coils may be paper scetion wound, cloth-taped and treated to make impervious to cutting oils and coolant. Installations is claimed to be simplified and operation made easy as these solenoids can be used for either direct or remote control on operations in which quick short thrusts are required. They can be furnished in any voltage and for a.c. or d.c.

"Calling All Horsepower"

"Calling All Horsepower," a program designed to save critical war materials and to get maximum production out of every motor, is announced in a new 20-page booklet by Westinghouse Electric and Mfg. Co.

Undertaken at the suggestion of the War Production Board, the "Calling All Horsepower" program points out how motor overload capacity can be used to get more production from every available unit of horsepower, and at the same time effect huge savings in critical materials.

Extinguisher Maintenance Important

The maintenance of fire extinguishers which are credited with stopping 70 per cent of all fires is especially important when wartime production, critical materials, plans and manpower are at stake. Many businesses, institutions and civilians will be unable to get new extinguishers of approved types for the duration and consequently must keep their present equipment in good operating condition. Fortunately recharging materials are still available.

To assist in proper maintenance a new folder entitled "Directions for Inspecting, Recharging and Maintaining Portable Fire Extinguishers" may be obtained upon request to the Pyrene Manufacturing Company, Newark, N. J.

Illuminating Nomenclature Revised

The American Standards Association recently approved a revision of the American Standard, Illuminating Engineering Nomenclature and Photometric Standards (Z7.1-1942). This revision marks a step in a long process of evolution in this field.

"Air Clean As A Whistle"

"Air Clean As A Whistle," new 4-page bulletin describing the application of Precipitron Electric Air Cleaning for large rotating electric machinery, is announced by Westinghouse Electric and Mfg. Co.

This illustrated bulletin tells what the Precipitron is, how it operates, and how it is installed. When air is cleaned by this method, particles as small as 1/250,000 of an inch in diameter are removed. Particles in the forced air stream are given an electric charge and then drawn off to oppositely charged plates.

A copy of Booklet B-8605 may be secured from the company at Edgewater Park, Cleveland, Ohio.

Manufacturers' Notes

Clarostat Receives Army-Navy "E"

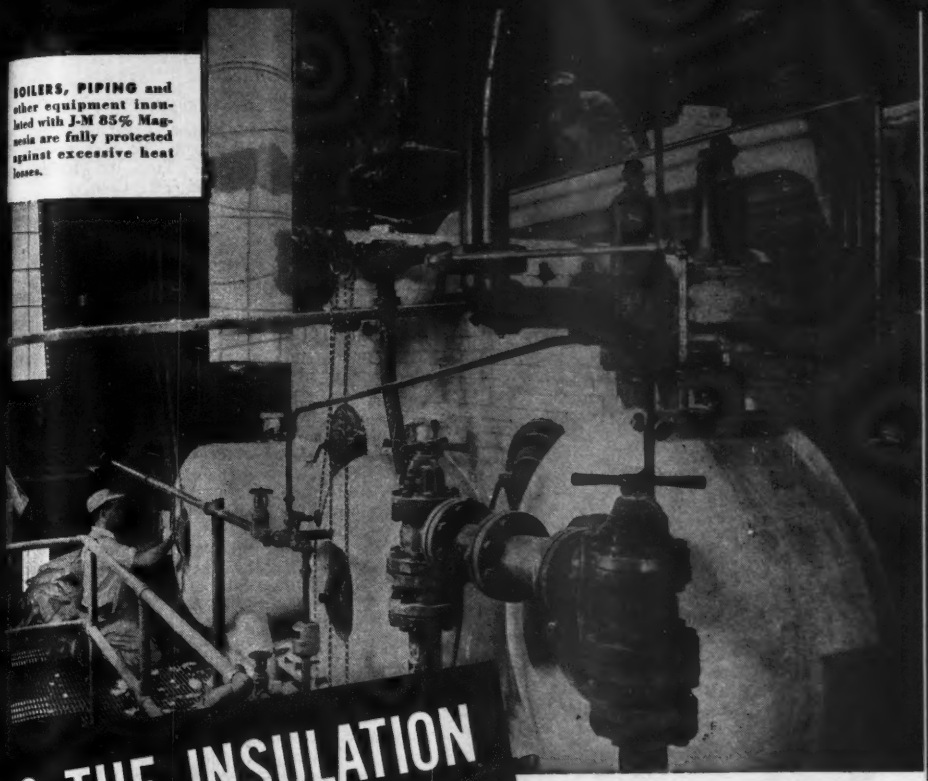
The Army-Navy "E" for excellence in production was recently awarded Clarostat Mfg. Co., Inc., of 285-7 N. 6th St., Brooklyn, N .Y.

The company manufactures resistors, controls and resistance devices for radio, electrical and allied purposes.

Gregory Made Vice-President and Director of Thornton

Bruce Gregory, formerly in charge of sales, of the Thornton Tandem Company of Detroit, has been made vice-president in charge of sales and a member of the board of directors, according to an announcement made by A. F. Knobloch, president.

Mr. Gregory, is well known in the automotive industry. He has been associated with the Thornton Tandem Company of Detroit, manufacturers of Four-Rear-Wheel Drive



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To assure every saving possible with in-lation, leading power plants rely on the J-M Insulation-Engineering Service. J-M Engineers offer you specialized experience and training that enable them to trace down costly heat losses that might otherwise go unnoticed. From the complete line of J-M Insulations, they can recommend the exact amount of the right material that assures maximum returns on your insulating investment.

For full information on this helpful free service and data on all J-M Industrial Insulations, write for Catalog IN-55A. Johns-Manville, 22 E. 40th St., N.Y.C.

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FOR EVERY TEMPERATURE . . . FOR EVERY SERVICE . . .

Superex . . . 85% Magnesia . . . JM-20 Brick . . . Sil-O-Cel C-22 Brick . . . Sil-O-Cel Natural Brick . . . J-M No. 500 Cement . . . Sil-O-Cel C-3 Concrete . . . Marinite

Manufacturers' Notes (Cont'd)

truck units, for about a year. Prior to joining Thornton Tandem Company, he was associated with the Firestone Tire and Rubber Company and the General Tire Company.

Public Service Contributes Trolley Rails To Scrap Drive

Public service transportation companies are making available through the Metals' Reserve Corporation, 3 Federal government agency, approximately 47,000 tons of trolley car rails for use in the war effort. This is one of the largest contributions to the scrap and salvage campaign.

This is enough scrap steel to build six battleships, the government estimates, or it could be utilized in the construction of any of the following: 55,000 aerial bombs; 3,000 medium tanks; 110,000 sixteen-inch shells; 2,200,000 fifty-caliber machine guns; 225,000 three-inch anti-aircraft guns or 110,000 seventy-five millimeter howitzers.

The rails—aggregating approximately 600 miles in length—are being salvaged from abandoned trolley car lines.

American Steel & Wire Promotes Pierson

Ernest F. Pierson has been appointed manager of the electrical and wire rope department of the American Steel & Wire Co. at Boston, Mass., succeeding the late Hugo D. Sharp.

Mr. Pierson has been with the company about 30 years, beginning with the manufacturing division at its Worcester, Mass., mills and later employed in the cable engineering department in that city. From 1927 to 1934 he was connected with the sales department at Boston, returning to the general sales office at Worcester with the title of general sales representative.

In 1941 Mr. Pierson was granted a leave of absence to become adviser to the purchasing division and copper branch of the OPM at Washington and was later made consultant to the copper branch of the WPB with headquarters in that city.

Whitney Heads Transformer Sales

Russel L. Whitney has been appointed sales manager of the Westinghouse transformer division in Sharon, Pa., according to an announcement by H. V. Putman, vice president and manager of the transformer division. A. C. Farmer, formerly assistant sales manager, has been named assistant to the vice president, and A. P. Bender, former sales manager, has been made assistant sales manager "to afford the best possible opportunity for his complete recovery" from an extended illness.

Save Critical Materials

Use this table as a guide for overloading Pennsylvania Power Transformers

Approximate Load in per cent of 55° C. Self-cooled Rating	Permissible Top-Oil Temperature
100%	75°C
115%	70°C
129%	65°C
142%	60°C
154%	55°C
166%	50°C

HOW TO USE OVERLOAD-TEMPERATURE TABLE

With any continuous load shown in the first column of the table, the top oil temperature in the transformer should not exceed the corresponding temperature shown in the second column. Intermediate values may be obtained by direct interpolation.

It is not always necessary to provide additional cooling to bring the top oil temperature down to 65° C., when the transformer is carrying 129% load.

column of the table, the top oil temperature in the transformer should not exceed the corresponding permissible value. Intermediate values may be obtained by direct interpolation.

EXAMPLE: If a transformer, while carrying 100% load, is found to have a top oil temperature of 75° C., and it is desired to carry 29% overload on this transformer, additional cooling must be provided to bring the oil temperature down to 65° C., when the transformer is carrying 129% load.

It is not always necessary to provide additional cooling in order to obtain additional capacity. Low ambient temperature, low load factor, and similar conditions will permit the transformer to be overloaded to the extent shown in the table, as long as the corresponding permissible oil temperatures are not exceeded.

ADDITION OF FORCED COOLING

Increased rating may be obtained economically by the addition of forced-air-cooling fans, or forced-oil-cooling units. For information as to type, number, and size of fans and cooling units, you are invited to consult our Engineering Department.

LIMITATIONS

The above guide applies to Pennsylvania Power Transformers which have been properly operated and maintained. The oil must be in good condition as indicated by dielectric strength and color. Samples of oil may be sent to our factory where they will be tested without charge.

Before applying overloads to transformers, a careful check should be made of the thermal capability of all associated equipment, such as circuit breakers, switches, current transformers, cables, meters and relays. Before exceeding 135% load on any transformer, it is recommended that advice be obtained from our Engineering Department as to any limitations involved, such as oil expansion, pressure in sealed-type units, bushing ratings, etc.

PERMANENCE

Like the stars, unaffected by time, as they follow in their course with unerring precision, you can depend upon the lasting and reliable performance of Mercoid hermetically sealed mercury type switches. • Mercoid Switches are immune to dust, dirt or corrosion. The contacting surfaces remain ever new after years of service. • You get this extra value in every Mercoid Control without any additional cost.

Although priorities are now necessary, an adequate stock of Mercoid Controls for essential uses h
been provided for. We will be glad to advise with you on your present and future requirement

THE MERCOID CORPORATION, 4213 Belmont Avenue, Chicago, Illino

THIS SIGN belongs in every factory, power plant and mill in the nation — yes, in every telephone exchange, garage and maintenance department of America's utilities and industries. For those long-lived Exide Batteries that operate your oil switches, energize your telephones, or crank your trucks, cars and buses, will last even longer when handled with care—when treated as outlined below.

Add approved water at regular intervals;

Keep them clean and dry. Wash off tops with a solution of one pound of bicarbonate of soda to one gallon of water—rinse, and dry thoroughly;

Keep the battery fully charged—but avoid excessive over-charge. A storage battery will last longer when charged at its proper voltage;

Keep written records of water additions, voltage and gravity readings for comparisons as battery grows older.

Write us for further information, stating battery application in which you are interested. We'll be glad to help you get all the long life that we build into our batteries.

Exide
BATTERIES

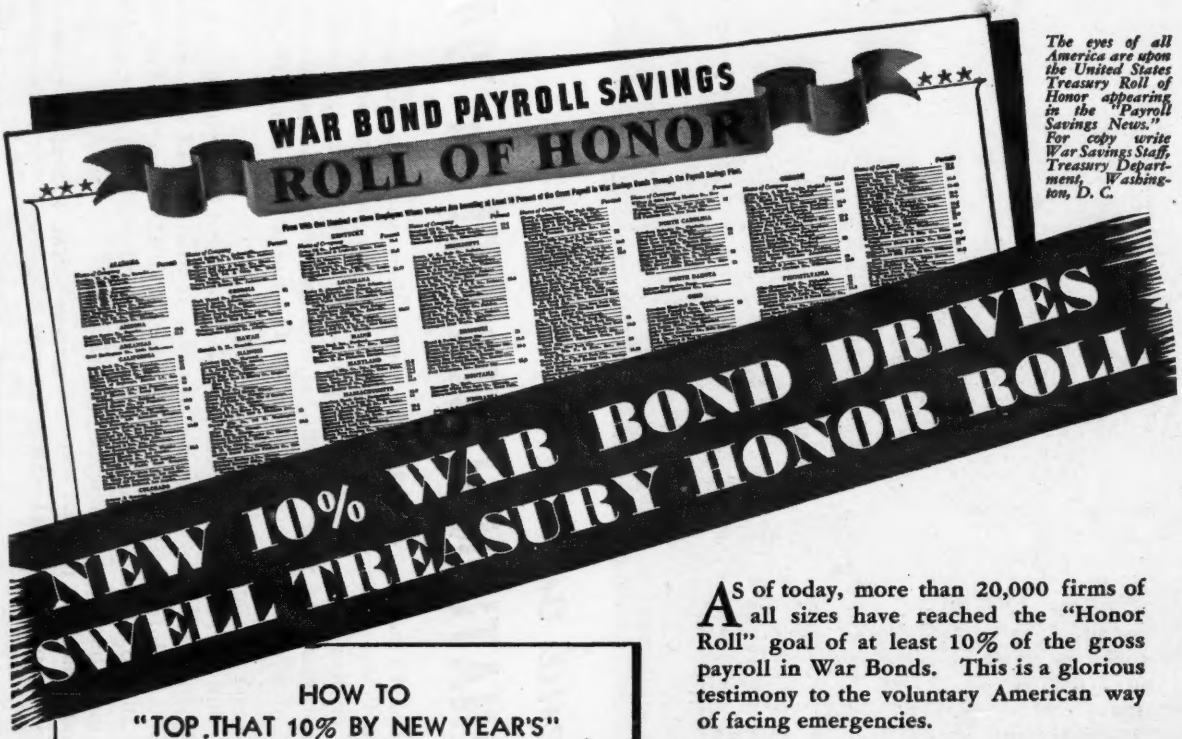
THE ELECTRIC STORAGE BATTERY COMPANY
The World's Largest Manufacturers of Storage Batteries for Every Purpose
PHILADELPHIA
Exide Batteries of Canada, Limited, Toronto

Transmission line construction costs can be materially reduced and completion expedited by using Hoosier Crews

HOOSIER ENGINEERING COMPANY

CHICAGO — 46 SO. 5TH ST., COLUMBUS, OHIO — NEW YORK

ERECTORS OF TRANSMISSION LINES



The eyes of all America are upon the United States Treasury Roll of Honor appearing in the "Payroll Savings News." For copy write War Savings Staff, Treasury Department, Washington, D. C.

HOW TO "TOP THAT 10% BY NEW YEAR'S"

Out of the 13 labor-management conferences sponsored by the National Committee for Payroll Savings and conducted by the Treasury Department throughout the Nation has come this formula for reaching the 10% of gross payroll War Bond objective:

It has been the Treasury experience wherever management and labor have gotten together and decided the

AS of today, more than 20,000 firms of all sizes have reached the "Honor Roll" goal of at least 10% of the gross payroll in War Bonds. This is a glorious testimony to the voluntary American way of facing emergencies.

But there is still more to be done. By January 1st, 1943, the Treasury hopes to raise participation from the present total of around 20,000,000 employees investing

30,000,000 investing an average of at least 10% of earnings in War Bonds.

the National Committee for Payroll Savings and conducted by the Treasury Department throughout the Nation has come this formula for reaching the 10% of gross payroll War Bond objective:

It has been the Treasury experience wherever management and labor have gotten together and decided the job could be done, the job was done.

2. ***Get a committee of labor and management to work out details for solicitation.***
   a. They, in turn, will appoint captain-leaders or chairmen who will be responsible for actual solicitation of no more than 10 workers.
   b. A card should be prepared for each and every worker with his name on it.
   c. An estimate should be made of the possible amount each worker can set aside so that an "over-all" of 10% is achieved. Some may not be able to set aside 10%, others can save more.
3. ***Set aside a date to start the drive.***
4. ***There should be little or no time between the announcement of the drive and the drive itself.***
   The drive should last not over 1 week.
5. The opening of the drive may be through a talk, a rally, or just a plain announcement in each department.
6. Schedule competition between departments; show progress charts daily.
7. Set as a goal the Treasury flag with a "T."

January 1st, 1943, the Treasury hopes to raise participation from the present total of around 20,000,000 employees investing [illegible] 50,000,000 investing an average of at least 10% of earnings in War Bonds.

You are urged to set your own sights accordingly and to do all in your power to start the new year on the Roll of Honor, to give War Bonds for bonuses, and to purchase up to the limit, both personally and as a company, of Series F and G Bonds. (Remember that the new limitation of purchases of F and G Bonds in any one calendar year has been increased from $50,000 to $100,000.)

TIME IS SHORT. Our country is counting on you to—

"TOP THAT 10% BY NEW YEAR'S"

Save with War Savings Bonds

This space is a Contribution to America's All-Out War Effort by *Public Utilities Fortnightly*

PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design and construction.

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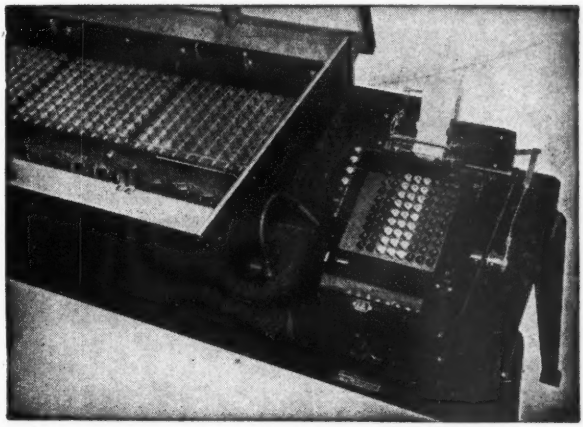


OF BILL ANALYSIS

WHAT effect is the national defense program having on your bill distribution? Analysis of customer usage data will provide the answer to this important question. In addition to a knowledge of the existing situation, certain trends may be disclosed, a knowledge of which may be of considerable importance to you under circumstances where the picture is rapidly changing.

The One Step Method of Bill Analysis is ideally suited to meet the needs of this problem. It does away with the necessity for temporarily acquiring, training and supervising a large clerical force. Our experienced staff plus our specially designed Bill Frequency Analyzer machines can turn out the job in a few days and at the cost of only a small fraction of a cent per item.

We will be glad to tell you more in detail about this accurate, rapid and economical method for obtaining a picture of your customer usage situation. Write for a copy of the booklet *"The One Step Method of Bill Analysis."*

Recording & Statistical Corporation

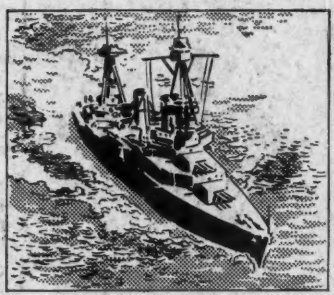
Utilities Division

102 Maiden Lane, New York, N. Y.

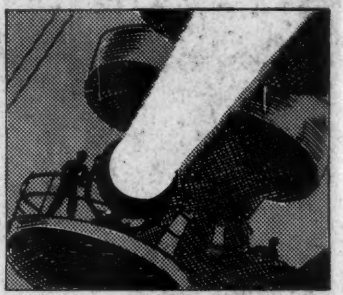
Boston Chicago Detroit Montreal Toronto

On the Seven Seas

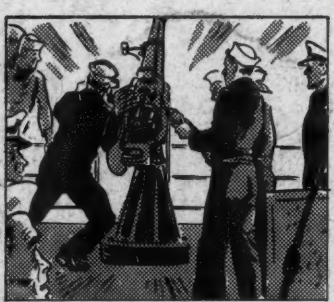
For 45 years General Electric has developed and built electric equipment for warships. Here are a few of the ways in which electricity serves the Navy.



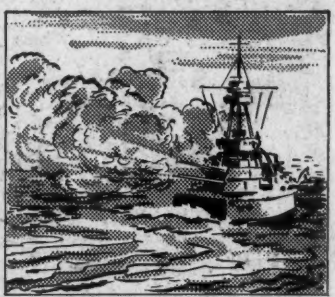
1. Just one battleship may have electric generators to produce as much as 180,000 kilowatts. This power would supply the needs of a city of 375,000.



2. Searchlights produce millions of candlepower of light to aid in detecting enemy ships and planes, and to guide Navy gunners to their targets.



3. More than 20 different operations are performed in bringing a naval gun to bear on its target. Electricity helps to co-ordinate these operations.



4. When a battleship goes into action, electricity helps direct the ship, operate the guns, and give the orders. G.E. is building equipment to do these jobs.

General Electric believes that its first duty as a good citizen is to be a good soldier.

General Electric Company, Schenectady, N. Y.

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